

¹H-NMR spectra of [TMGH]₂[PheCO₂] and [DBUH]₂[PheCO₂] in DMSO



¹³C-NMR spectra of [TMGH]₂[PheCO₂] and [DBUH]₂[PheCO₂] in DMSO



FTIR spectra of [TMGH]₂[PheCO₂] and [DBUH]₂[PheCO₂] in KBr

FTIR: carbamate and carboxylate characteristic bands of the prepared TMG based compounds

Cm ⁻¹ cm ⁻¹ (TMGH' based carbamates) COO- NCOO- [COO- Zwiterionic aminoacid] {NCOO- from carbamate based TSLs [17]; from carbamate based amino- esters [13]} (NCOC ammonium carbamate"[22]) Bands not present in the spectra of TMGH' - AA : [24] ^b [TMGH'] ₂ [GlyCOO-] [If06 s, 1575] (Id50 s, 1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 1700.00 m, 1561.57 s, 1561.6 s 1373.24 m, 1317.21 m, 1008.72 w, 979.81 w, 831.40 mw, 703.25 w, 668.29 w [TMGH'] ₂ [AlaCOO-] I621 s, 1589 s {I666, 1575} (I400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1668.42 s, 1587.17 s, 1567.35 s, 1508.34 m 1372.48 m, 1329.95 m, 1m, 1009.1 w, 989.47 w, 830.8 w, 703.6 w, 669.3 w [IMGH'] ₂ [ValCOO-] [TMGH'] ₂ [ValCOO-] I612 s, 1588 s, 1566 s {1666, 1575} (I400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1672.13 m, 1587.17 s, 1567.35 s 1372.48 m, 1329.95 w, 108.34 w, 980.38 w, 830.95 w, 703.68 w, 664.43 w [ITMGH'] ₂ [PheCOO-] [ITMGH'] ₂ [PheCOO-] I612 s, 1588 s, 1556.0 s, 1546.3 s, 1535.6 s] 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.m, 701 m, 666 w) 1638.1 m, 1566.3 s, 1537.57 (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 11300, 1307.90 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w)	Compounds	FTIR	FTIR	
(TMGH* based carbamates) COO- Zwiterionic aminoacid (NCOO- from carbamate based TSILs [17]; from carbamate based amino- esters [13]; [TMGH*]; [GlyCOO] {NCOO- Zwiterionic aminoacid {NCOO- Zwiterionic aminoacid {NCOO- attributerionic astronoversity [TMGH*]; [GlyCOO] {NCOO- Zwiterionic aminoacid {NCOO- attributerionic astronoversity {NCOO- attributerionic astronoversity [TMGH*]; [GlyCOO] {II660, 1575; (1650 s, 1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, m, 701 m, 666) 1700.00 m, 1561.57 s, 1561.6 s [TMGH*]; [AlaCOO] [II621 s, 1589 s] {1666, 1575; (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1656.42 s, 1587.17 s, 1567.35 s, 1508.34 m [TMGH*]; [ValCOO] [II612 s, 1589 s] {1666, 1575; (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1672.13 m, 1587.17 s, 1567.35 s [TMGH*]; [ValCOO] [II612 s, 1583 s]] {1672.13 m, 1587.17 s, 1567.35 s 1372.48 m, 1329.95 m, 100.10 w, 978 w, 831 m, 701 m, 666 w) [MGH*]; [ValCOO] [II610 s, 1583 s]] {1666, 1575} {1700 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) [TMGH*]; [LeuCOO] [II610 s, 1583 s]] {1666, 1575} {1703 s, 1560.5 s, 1575, {1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) [G88 m, 1566.36 s] 1373.14 m, 1316.54 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w [1373.0, 109.5, y76.4, 831.5, 702.4, 660.8] {1666, 1		cm ⁻¹	cm ⁻¹	
carbamates) COO- [COO- Zwiterionic aminoacid] NCOO- {NCOO- [NCOO- ammonium carbamate based amino- esters [13]} [TMGH*]_ [GlyCOO-] {NCOO- ammonium carbamate based amino- esters [13]} (NCOO ammonium carbamate*[22]) Bands not present in the spectra of TMGH* - AA: [24]# [TMGH*]_ [GlyCOO-] 1606 s, 1592 s {1656 s, 1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666) 1373.24 m, 1317.21 m, 1008.72 w, 979.81 w, 831.40 mw, 703.25 w, 668.29 w [TMGH*]_ [AlaCOO-] 1612 s, 1589 s {1666, 1575} {(1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1372.48 m, 1329.95 m, 1m, 1009.11 w, 989.47 w, 830.8 w, 703.64 w, 669.3 w [TMGH*]_ [ValCOO-] 1612 s, 1586 s, 1566 s {1666, 1575} {(1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1372.48 m, 1329.95 w, 1008.34 w, 980.38 w, 830.95 w, 703.68 w, 664.43 w [TMGH*]_ [ValCOO-] 1610 s, 1583 s {1666, 1575} {(1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.21 m, 7038 lm, 666.97 m [TMGH*]_ [PheCOO-] 1626 s, 1575 s {1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1633.01 m, 1307.90 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1625 s 560.5 s, 1546.3 s, 1537.3 s, 1560.5 s, 1550.8 s, 1556.0 s, 1546.3 s, 1537.3 (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1633.01 m, 1307.90 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1665.1575 {(1400	(TMGH ⁺ based			
INDEMINEY Image: COO_Zwiterionic aminoacid] {NCOO- from carbamate based TSLs [17], from carbamate based amino-aminoacid] esters [13]; (NCOO ammonium carbamate'[22]) Bands not present in the spectra of TMGH* . AA-[24] ^b [TMGH*]2 [GlyCOO] (Il606, 1575; (I650 s, 1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666) 1700.00 m, 1561.57 s, 1561.6 s 1373.24 m, 1317.21 m, 1008.72 w, 979.81 w, 831.40 mw, 703.25 w, 668.23 w [TMGH*]2 [AlaCOO7] [Il621 s, 1589 s]] [IMGH*]2 [AlaCOO7] [Il624 s, 1587.17 s, 1567.35 s, 1508.34 m 1372.48 m, 1329.95 m, 1000.91 w, 992.47 w, 830.8 w, 703.66 w) 1668.42 s, 1587.17 s, 1567.35 s, 1508.34 m 1372.48 m, 1329.95 m, 1010 w, 978 w, 831 m, 701 m, 666 w) 1665.1575; [1MGH*]2 [ValCOO7] Il612 s, 1588 s, 1566.3] [TMGH*]2 [LeuCO07] Il610 s, 1583 s] [TMGH*]2 [ValCOO7] Il610 s, 1583 s] [TMGH*]2 [LeuCO07] Il610 s, 1583 s] [TMGH*]2 [ValCO07] Il610 s, 1583 s] [TMGH*]2 [PheCO07] Il610 s, 1583 s] [TMGH*]2 [LeuCO07] Il610 s, 1583 s] [ITMGH*]2 [PheCO07] Il610 s, 1583 s] [ITMGH*]2 [PheCO07] Il610 s, 1583 s] [ITMGH*]2	carbamates)	COO-	NCOO-	
COO'Zwiterionic aminoacid {NCOO- from carbamate based TSILs [17]; from carbamate based amino- esters [13]} (NCOO ammonium carbamate"[22]) Bands not present in the spectra of TMGH* . AA: [24]* [TMGH*]2 [GlyCOO'] 1606 s, 1592 s {1666, 1575} (1650 s, 1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666) [TMGH*]2 [AlaCOO'] 1611 s, 1589 s {1666, 1575} [TMGH*]2 [AlaCOO'] 1612 s, 1587 s] {1672.13 m, 1090, 1w, 984.4 m, 1329.95 m, 1m, 1009.1 w, 984.4 m, 1329.95 w, 1008.34 w, 980.38 w, 831 m, 701 m, 666 w) [TMGH*]2 [ValCOO'] 1612 s, 1583 s, 1566 s {1666, 1575} [TMGH*]2 [LeuCOO'] 1610 s, 1533 s {1666, 1575} [TMGH*]2 [LeuCOO'] 1612 s, 1586 s] [TMGH*]2 [PheCOO'] 1626 s, 1502 s {1666, 1575} [TMGH*]2 [PheCOO'] 1626 s, 150				
[] [] [] [] [] [] [] [] [] [] [] [] [] [11COO-	NCOO from carbamate based TSU s	
Zwiterionic aminoacidiji [17], itom carbamate based animo- esters [13]; [TMGH*]2 [GlyCOO] [If difficulty] [TMGH*]2 [GlyCOO] [If difficulty] [ITMGH*]2 [GlyCOO] [If difficulty] [If difficulty]2 [GlyCOO] [If difficulty]2 [If difficulty] [If MGH*]2 [GlyCOO] [If difficulty]2 [If d		€00 7itii-	[17], from each mate based 131LS	
aminoacid esters [13]} (NCOO ammonium carbamatte*[22]) [Bands not present in the spectra of TMGH*. AA: [24]*] [ITMGH*]2 [GlyCOO] (1666, 1575) (1666, 1575) (1666, 1575) (1666, 1575) (1666, 1575) (1670.00 m, 1624 w, 1010 w, 978 w, 831 m, 701 m, 701 m, 703.25 w, 668.29 w [ITMGH*]2 [AlaCOO] [ITMGH*]2 [ValCOO] [ITMGH*]2 [ValCOO] <td< th=""><th></th><th>Zwiterionic</th><th>[17]; from carbamate based amino-</th></td<>		Zwiterionic	[17]; from carbamate based amino-	
[NCOO ⁺ ammonium carbamate ² [22)] Bands not present in the spectra of TMGH ⁺ . AA [24] ⁹ [TMGH ⁺] ₂ [GlyCOO ⁺] 1606 s, 1592 s {1666, 1575} [1606 s, 1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666) 1700.00 m, 1561.57 s, 1561.6 s 1373.24 m, 1317.21 m, 1008.72 w, 979.81 w, 831.40 mw, 701 m, 666) 1700.00 w, 1561.57 s, 1561.6 s 1373.24 m, 1317.21 m, 1008.72 w, 979.81 w, 831.40 mw, 701 m, 666 1666, 1573 (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1668.42 s, 1587.17 s, 1567.35 s, 1508.34 m 1372.48 m, 1329.95 m, 1m, 1009.1 w, 989.47 w, 830.8 w, 703.6 w, 669.3 w [TMGH ⁺] ₂ [ValCOO ⁻] [ITMGH ⁺] ₂ [ValCOO ⁻] [III [ICal s, 1583 s] <th></th> <th>aminoacid</th> <th>esters [13]}</th>		aminoacid	esters [13]}	
Bands not present in the spectra of TMGH* . AA: [24] ^s [TMGH*] ₂ [GlyCOO] 1606 s, 1592 s {1666, 1575} (1650 s, 1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666) 1700.000 m, 1561.57 s, 1561.6 s 1373.24 m, 1317.21 m, 1008.72 w, 979.81 w, 831.40 mw, 703.25 w, 668.29 w [TMGH*] ₂ [AlaCOO] 1612 s, 1589 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1668.42 s, 1587.17 s, 1567.35 s, 1508.34 m 1372.48 m, 1329.95 m, 1m, 1009.1 w, 989.47 w, 830.8 w, 703.6 w, 669.3 w [TMGH*] ₂ [ValCOO] 1612 s, 1586 s, 1566 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1672.13 m, 1587.17 s, 1567.35 s 1372.48 m, 1329.95 m, 1008.34 w, 980.38 w, 830.95 w, 703.68 w, 664.43 w [TMGH*] ₂ [LeuCOO] 1610 s, 1583 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1672.13 m, 1587.17 s, 1567.35 s 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.21 m, 703.81 m, 668.97 m [TMGH*] ₂ [PheCOO] 1626 s, 1575 {1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.51 m, 702.4 m, 600.8 s 373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.51 m, 702.4 m, 660.8 s [TMGH*] ₂ [TrpCOO-] 1655 s, 1612 s, 1584 s {1666, 1575 } {1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 163.30 s, 1564.20 s, 1584.52 m, 1534.52 m,			(NCOO ⁻ ammonium carbamate ^a [22])	
TMGH* AA: [24] ^b [TMGH*] ₂ [GlyCOO-] [11606 s, 1592 s]] [1650 s, 1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666) 1700.00 m, 156.57 s, 1561.6 s [1373.24 m, 1317.21 m, 1008.72 w, 979.81 w, 831.40 mw, 703.25 w, 668.29 w [1661, 1575] [TMGH*] ₂ [AlaCOO-] [1621 s, 1589 s]] [1666, 1575] (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1668.42 s, 1587 ls, 1567.35 s, 1508.34 m 1372.48 m, 1329.95 m, 1m, 1009.1 w, 989.47 w, 830.8 w, 703.6 w, 669.3 w [TMGH*] ₂ [ValCOO-] [[1612 s, 1586 s, 1566 s]] [1666, 1575] (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1672.13 m, 1587.17 s, 1567.35 s [17MGH*] ₂ [ValCOO-] [[1610 s, 1583 s]] [1666, 1575] (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1672.13 m, 1587.17 s, 1567.35 s [17MGH*] ₂ [LeuCOO-] [[1610 s, 1583 s]] [1666, 1575] (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl [373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl [373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5, 702.4, 660.8] [1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5, 702.4, 660.8] [17MGH*] ₂ [TrpCOO-]			Bands not present in the spectra of	
[TMGH*]2 [GlyCOO-] 1606 s, 1592 s {1666, 1575} {1666, 1575} (1650 s, 1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 701 m, 666) 1700.00 m, 1561.57 s, 1561.6 s 1373.24 m, 1317.21 m, 1008.72 w, 979.81 w, 831.40 mw, 703.25 w, 668.29 w [TMGH*]2 [AlaCOO7] 1621 s, 1589 s {1666.4575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1372.48 m, 1329.95 m, 1m, 1009.1 w, 989.47 w, 830.8 w, 703.6 w, 669.3 w [TMGH*]2 [ValCOO7] 1612 s, 1586 s, 1566 s {1666.4575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1672.13 m, 1587.17 s, 1567.35 s 1372.48 m, 1329.95 w, 1008.34 w, 980.38 w, 830.95 w, 703.68 w, 664.43 w [TMGH*]2 [LeuCOO7] 1610 s, 1583 s {1666.1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1672.13 m, 1587.17 s, 1567.35 s 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 s, 831.5 m, 702.4 m, 660.8 w [17MGH*]2 [PheCOO7] 1626 s, 1502 s, 1545.0 s, 1545.3 s, 1577.9 s, 1577.9 s, 1573.5 s, 1502.3 s, 1560.5 s, 1545.5 m <		TMGH ⁺ . AA ⁻ [24] ^b		
Image: Constraint of the set of th	[TMGH ⁺] ₂ [GlyCOO ⁻]	1606 s. 1592 s		
(1650 s, 1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666) 1700.00 m, 1561.57 s, 1561.6 s 1373.24 m, 1317.21 m, 1008.72 w, 979.81 w, 831.40 mw, 703.25 w, 668.29 w [TMGH*]2 [AlaCOO] 1621 s, 1589 s (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1668.42 s, 1587.17 s, 1567.35 s, 1508.34 m 1372.48 m, 1329.95 m, 1m, 1009.1 w, 989.47 w, 830.8 w, 703.6 w, 669.3 w 1612 s, 1586 s [TMGH*]2 [ValCOO] 1612 s, 1586 s, 1566 s (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1666 s, 1575] (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1672.13 m, 1587.17 s, 1567.35 s [TMGH*]2 [LeuCOO] 1610 s, 1583 s (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1666 s, 1575] (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl [TMGH*]2 [PheCOO] 1612 s, 1582 s [1666, 1575] (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1537.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w [17MGH*]2 [PheCOO] 1626 s, 162 s, 1584 s [1606, 1575] (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1666.5 s, 1512 s, 1546.5 s, 1546.3 s, 1537.10 m, 1307.90 m, 1292.0 m, 1009.5		{1666, 1575}		
m, 701 m, 666) 1700.00 m, 1561.57 s, 1561.6 s 1373.24 m, 1317.21 m, 1008.72 w, 979.81 w, 831.40 mw, 703.25 w, 668.29 w [TMGH*] ₂ [AlaCOO] 1621 s, 1589 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 16668.42 s, 1587.17 s, 1567.35 s, 1508.34 m 1372.48 m, 1329.95 m, 1m, 1009.1 w, 989.47 w, 830.8 w, 703.56 w, 669.3 w 11612 s, 1586 s, 1566 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1672.13 m, 1587.17 s, 1567.35 s 1372.48 m, 1329.95 w, 1008.34 w, 980.38 w, 830.95 w, 703.68 w, 664.43 w [TMGH*] ₂ [LeuCOO] 1610 s, 1583 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.21 m, 703.81 m, 668.97 m [TMGH*] ₂ [PheCOO] 1626 s, 1562 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1500.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 831 m, 701 m, 666 w) 1663.30 s, 1554.2 s, 1534.5 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1564.20 s, 163.00 s, 1534.8 s {1375.0 m, 1313.9 w, 1		(1650 s, 1400	s, 1300 m, 1024 w, 1010 w, 978 w, 831	
1700.00 m. 1561.57 s. 1561.6 s 1373.24 m, 1317.21 m, 1008.72 w, 979.81 w, 831.40 mw, 703.25 w, 668.29 w [TMGH*] ₂ [AlaCOO] 1621 s. 1589 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1668.42 s. 1587.17 s. 1567.35 s. 1508.34 m 1372.48 m, 1329.95 m, 1m, 1009.1 w, 989.47 w, 830.8 w, 703.6 w, 669.3 w [TMGH*] ₂ [ValCOO] 1612 s. 1586 s. 1566 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1672.13 m, 1587.17 s. 1567.35 s 1372.48 m, 1329.95 w, 1008.34 w, 980.38 w, 830.95 w, 703.68 w, 664.43 w [TMGH*] ₂ [LeuCOO] 1610 s, 1583 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.21 m, 703.81 m, 668.97 m [TMGH*] ₂ [PheCOO] 1620 s, 1562 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1690.9 m, 15667.1 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w [TMGH*] ₂ [TrpCOO] 1665 s, 1612 s, 1584 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1654.20 s, 1536.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.			m, 701 m, 666)	
I373.24 m, 1317.21 m, 1008.72 w, 979.81 w, 831.40 mw, 703.25 w, 668.29 w [TMGH*]2 [AlaCOO] 1621 s, 1589 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) I668.42 s, I587.17 s, 1567.35 s, 1508.34 m I372.48 m, 1329.95 m, 1m, 1009.1 w, 989.47 w, 830.8 w, 703.6 w, 669.3 w [TMGH*]2 [ValCOO] 1612 s, 1586 s, 1566 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) ITMGH*]2 [ValCOO] 1610 s, 1583 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) ITMGH*]2 [LeuCOO] 1610 s, 1583 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) ITMGH*]2 [LeuCOO] 1610 s, 1583 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) I688 m, 1566.36 sl 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.21 m, 703.81 m, 668.97 m [TMGH*]2 [PheCOO] 162 s, 1562 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) I690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w [TMGH*]2 [TrpCOO] 1665 s, 1542.2 m, 1534.5 m, 1277.6 w, 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 606.8 w [1373.10 m, 1307.90 m, 1222.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 606.8 w [1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 608.8 w [1375.0 m, 1313.9 w, 1292.0 w, 1		17	00.00 m, 1561.57 s, 1561.6 s	
mw, 703.25 w, 668.29 w [TMGH*] ₂ [AlaCOO ⁻] 1621 s, 1589 s (1666, 1575) (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1668.42 s, 1587.17 s, 1567.35 s, 1508.34 m 1372.48 m, 1329.95 m, 1m, 1009.1 w, 989.47 w, 830.8 w, 703.6 w, 669.3 w [TMGH*] ₂ [ValCOO ⁻] 1612 s, 1586 s, 1566 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1672.13 m, 1587.17 s, 1567.35 s 1372.48 m, 1329.95 w, 1008.34 w, 980.38 w, 830.95 w, 703.68 w, 664.43 w [TMGH*] ₂ [LeuCOO ⁻] 1610 s, 1583 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.21 m, 703.81 m, 668.97 m [TMGH ⁺] ₂ [PheCOO ⁻] 1626 s, 1562 s {1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1550.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 109.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w [TMGH ⁺] ₂ [TrpCOO ⁻] 1655 s, 1612 s, 1584 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w		1373.24 m, 1317.21 m, 1008.72 w, 979.81 w, 831.40		
[TMGH*]₂ [AlaCOO ⁻] 1621 s, 1589 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1668.42 s, 1587.17 s, 1567.35 s, 1508.34 m 1372.48 m, 1329.95 m, 1m, 1009.1 w, 989.47 w, 830.8 w, 703.6 w, 669.3 w [TMGH*]₂ [ValCOO ⁻] 1612 s, 1586 s, 1566 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1672.13 m, 1587.17 s, 1567.35 s 1372.48 m, 1329.95 w, 1008.34 w, 980.38 w, 830.95 w, 703.68 w, 664.43 w [TMGH*]₂ [LeuCOO ⁻] 1610 s, 1583 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 11610 s, 1583 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 11688 m, 1566.36 sl 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.21 m, 703.81 m, 668.97 m [TMGH*]₂ [PheCOO ⁻] 1626 s, 1562 s {1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w 373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w [TMGH*]₂ [TrpCOO ⁻] 165 s, 1512 s, 1584 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 163.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w			mw, 703.25 w, 668.29 w	
{1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1668.42 s, 1587.17 s, 1567.35 s, 1508.34 m 1372.48 m, 1329.95 m, 1m, 1009.1 w, 989.47 w, 830.8 w, 703.6 w, 669.3 w [TMGH*] ₂ [ValCOO ⁻] 1612 s, 1586 s, 1566 s {11666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1672.13 m, 1587.17 s, 1567.35 s 1372.48 m, 1329.95 w, 1008.34 w, 980.38 w, 830.95 w, 703.68 w, 664.43 w [TMGH ⁺] ₂ [LeuCOO ⁻] 1610 s, 1583 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w 373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 701 m, 666 w) 1663.30 s, 1564.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 m, 702.4, 660.8] [TMGH ⁺] ₂ [TrpCOO ⁻] 1665 s, 1612 s, 1584 s { 666, 1575} { 1400 s, 1300 m, 1024 w, 1010 w, 978 w, 83	[TMGH ⁺] ₂ [AlaCOO ⁻]		1621 s, 1589 s	
(1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1668.42 s, 1587.17 s, 1567.35 s, 1508.34 m 1372.48 m, 1329.95 m, 1m, 1009.1 w, 989.47 w, 830.8 w, 703.6 w, 669.3 w [TMGH+] ₂ [ValCOO-] 1612 s, 1586 s, 1566 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1672.13 m, 1587.17 s, 1567.35 s 1372.48 m, 1329.95 w, 1008.34 w, 980.38 w, 830.95 w, 703.68 w, 664.43 w [TMGH+] ₂ [LeuCOO-] 1610 s, 1583 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.21 m, 703.81 m, 668.97 m [TMGH+] ₂ [PheCOO-] 1626 s, 1562 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4, 660.8] 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 831 m, 701 m, 666 w) [ETMGH+] ₂ [TrpCOO-] 1665 s, 1612 s, 1584 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 831 m, 701 m, 666 w) 1663.30 s, 1564.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w 1375.0 l, 1329.0 k, 260.8 w 1375.0 l, 1329.0 k, 260.8 d 1375.0 l, 1329.0 k, 260.8 d 1375.0 l,		{1666, 1575}		
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Iotext State Iotext State Iotext State ITMGH*]2 [ValCOO] [Iotext State		m, 666 w)		
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830.8 w, 703.6 w, 669.3 w [TMGH*]2 [ValCOO-] 1612 s, 1586 s, 1566 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1672.13 m, 1587.17 s, 1567.35 s 1372.48 m, 1329.95 w, 1008.34 w, 980.38 w, 830.95 w, 703.68 w, 664.43 w [TMGH*]2 [LeuCOO-] 1610 s, 1583 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1673.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831 m, 701 m, 666 w) 11626 s, 1562 s [TMGH*]2 [PheCOO-] 1626 s, 1562 s [1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1537.5 m [373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 11373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 [TMGH+]2 [TrpCOO-] 1665 s, 1612 s, 1584 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 163.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w [375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w 113		1372.48 m, 1329.95 m, 1m, 1009.1 w, 989.47 w,		
[TMGH ⁺] ₂ [ValCOO ⁻] 1612 s, 1586 s, 1566 s {1666, 1575} {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1672.13 m, 1587.17 s, 1567.35 s 1372.48 m, 1329.95 w, 1008.34 w, 980.38 w, 830.95 w, 703.68 w, 664.43 w 1672.13 m, 1583.1] [TMGH ⁺] ₂ [LeuCOO ⁻] 1610 s, 1583 s [TMGH ⁺] ₂ [LeuCOO ⁻] 1616 s, 1575] (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl [TMGH ⁺] ₂ [PheCOO ⁻] 1626 s, 1562 s [TMGH ⁺] ₂ [PheCOO ⁻] 1626 s, 1562 s [TMGH ⁺] ₂ [PheCOO ⁻] 1626 s, 1560 s, 1556.0 s, 1546.3 s, 1535.5 m [TMGH ⁺] ₂ [PheCOO ⁻] 1626 s, 1562 s [TMGH ⁺] ₂ [PheCOO ⁻] 1626 s, 1560 s, 1556.0 s, 1546.3 s, 1535.5 m [TMGH ⁺] ₂ [PheCOO ⁻] 1665 s, 1560 s, 1556.0 s, 1546.3 s, 1535.5 m [TMGH ⁺] ₂ [TrpCOO ⁻] 1665 s, 1612 s, 1584 s {1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w [375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w 375.0 n, 331.30 w, 1292.0 s, 704.6		830.8 w, 703.6 w, 669.3 w		
{1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1672.13 m, 1587.17 s, 1567.35 s 1372.48 m, 1329.95 w, 1008.34 w, 980.38 w, 830.95 w, 703.68 w, 664.43 w [TMGH ⁺] ₂ [LeuCOO ⁻] 1610 s, 1583 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.21 m, 703.81 m, 668.97 m [TMGH ⁺] ₂ [PheCOO ⁻] 1626 s, 1562 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w 1373.10, 1009.5, 976.4, 831.5, 702.4, 660.8] [TMGH ⁺] ₂ [TrpCOO ⁻] 1665 s, 1612 s, 1584 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w 1375.0, 1292.0, 829.5, 704.6	[TMGH ⁺] ₂ [ValCOO ⁻]		1612 s, 1586 s, 1566 s	
[1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) m, 666 w) 1372.48 m, 1329.95 w, 1008.34 w, 980.38 w, 830.95 w, 703.68 w, 664.43 w [TMGH*]2 [LeuCOO] 1610 s, 1583 s (1666, 1575) (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.21 m, 703.81 m, 668.97 m [TMGH*]2 [PheCOO] 1626 s, 1562 s (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 x)) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 [TMGH+]2 [TrpCOO-] 1665 s, 1612 s, 1584 s (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1654.20 s, 1545.20 m, 1034.5 w, 7057.5 (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 660 s) 1673.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w [TMGH+]2 [TrpCOO-] 1665 s, 1612 s, 1584 s (1666, 1575) (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1554.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1576.3 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 704.6 w, 660.8 w			{1666, 1575}	
m, 666 w) 1672.13 m, 1587.17 s, 1567.35 s 1372.48 m, 1329.95 w, 1008.34 w, 980.38 w, 830.95 w, 703.68 w, 664.43 w [TMGH ⁺] ₂ [LeuCOO ⁻] 1610 s, 1583 s {1666, 1575} {1666, 1575} {17400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1100 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl 11373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.21 m, 703.81 m, 668.97 m [TMGH ⁺] ₂ [PheCOO ⁻] 1626 s, 1562 s {1666, 1575} {1600 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w 177.10, 1009.5, 976.4, 831.5, 702.4, 660.8] [TMGH ⁺] ₂ [TrpCOO ⁻] 1665 s, 1612 s, 1584 s {1666, 1575} {1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8] [TMGH ⁺] ₂ [TrpCOO ⁻] 1665 s, 1612 s, 1584 s {1666, 1575} {1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1554.20 s, 1545.20 s, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w 1375.0, 1292.0, 829.5, 704.6		(1400 s, 1300	0 m, 1024 w, 1010 w, 978 w, 831 m, 701	
1672.13 m, 1587.17 s, 1567.35 s 1372.48 m, 1329.95 w, 1008.34 w, 980.38 w, 830.95 w, 703.68 w, 664.43 w [TMGH ⁺] ₂ [LeuCOO ⁻] 1610 s, 1583 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.21 m, 703.81 m, 668.97 m [TMGH ⁺] ₂ [PheCOO ⁻] 1626 s, 1562 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w [TMGH ⁺] ₂ [TrpCOO ⁻] 1165 s, 1612 s, 1584 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) [TMGH ⁺] ₂ [TrpCOO ⁻] 1665 s, 1612 s, 1584 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) [TMGH ⁺] ₂ [TrpCOO ⁻] 1375.10 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w		m, 666 w)		
I372.48 m, 1329.59 w, 1008.34 w, 980.38 w, 830.95 w, 703.68 w, 664.43 w [TMGH*]2 [LeuCOO] 1610 s, 1583 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) I373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.21 m, 703.81 m, 668.97 m [TMGH*]2 [PheCOO] 1626 s, 1562 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) ITMGH*]2 [PheCOO] 1626 s, 1562 s {1606, 1575} [TMGH*]2 [PheCOO] 1626 s, 1560 s, 1556.0 s, 1546.3 s, 1535.5 m I373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w 1373.10 09.5, 976.4, 831.5, 702.4, 660.8] [TMGH*]2 [TrpCOO] 1665 s, 1612 s, 1584 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) I663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w		1070 10 167	<u>72.13 m, 1587.17 s, 1567.35 s</u>	
w, 703.08 W, 004.43 W [TMGH ⁺] ₂ [LeuCOO ⁻] 1610 s, 1583 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.21 m, 703.81 m, 668.97 m [TMGH ⁺] ₂ [PheCOO ⁻] 1626 s, 1562 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w 373.10, 1009.5, 976.4, 831.5, 702.4, 660.8 [TMGH ⁺] ₂ [TrpCOO ⁻] [IMGH ⁺] ₂ [TrpCO ⁻] [IMGH ⁺] ₂ [TrpC ⁻] <th></th> <th colspan="3">1372.48 m, 1329.95 w, 1008.34 w, 980.38 w, 830.95</th>		1372.48 m, 1329.95 w, 1008.34 w, 980.38 w, 830.95		
[IMGH]2 [LeuCOO] [[1610 s, 1583 s]] {1660, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 s] 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.21 m, 703.81 m, 668.97 m [TMGH*]2 [PheCOO] [[1626 s, 1562 s]] (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w 11373.10, 1009.5, 976.4, 831.5, 702.4, 660.8] [TMGH+]2 [TrpCOO-] [[1666, 1575] (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w 11375.0, 1292.0, 829.5, 704.6]	TTMCHH II COOL	w, /03.68 w, 664.43 w		
[1000, 15/3] (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.21 m, 703.81 m, 668.97 m [TMGH*]2 [PheCOO7] [I1626 s, 1562 sl] (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w [1373.10, 1009.5, 976.4, 831.5, 702.4, 660.8] [TMGH+]2 [TrpCOO7] [I1665 s, 1612 s, 1584 sl] [1666, 1575] (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1373.10, 1009.5, 976.4, 831.5, 702.4, 660.8] [ITMGH+]2 [TrpCOO7] [I1665 s, 1612 s, 1584 sl] [1666.30 s, 1504 s, 1507 s, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w [1375.0, 1292.0, 829.5, 704.6]	[IMGH [*]] ₂ [LeuCOO]		1010 \$, 1585 \$ (1666 1575)	
[1400 s, 1500 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1688 m, 1566.36 sl 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.21 m, 703.81 m, 668.97 m [TMGH*]2 [PheCOO*] [[1666, 1575] [[1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w [[TMGH+]2 [TrpCOO*] [[IMGH+]2 [TrpCOO*] [[IMGH+]2 [TrpCOO*] [[1665 s, 1612 s, 1584 sl] {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w		(1400 - 120)	$\{1000, 15/5\}$	
m, boo w) 1688 m, 1566.36 sl 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.21 m, 703.81 m, 668.97 m [TMGH ⁺] ₂ [PheCOO ⁻] 1626 s, 1562 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w [1373.10, 1009.5, 976.4, 831.5, 702.4, 660.8] [TMGH ⁺] ₂ [TrpCOO ⁻] 1665 s, 1612 s, 1584 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w		(1400 S, 1500	<i>(1024 w, 1010 w, 978 w, 851 m, 701)</i>	
1088 m, 1206.36 s1 1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28 w, 831.21 m, 703.81 m, 668.97 m [TMGH ⁺] ₂ [PheCOO ⁻] 1626 s, 1562 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w 173.10, 1009.5, 976.4, 831.5, 702.4, 660.8 [TMGH ⁺] ₂ [TrpCOO ⁻] 1665 s, 1512 s, 1584 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1654.20 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w 375.0, 1292.0, 829.5, 704.6		<i>m</i> , 666 <i>w</i>)		
[3/3.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 9/9.28 w, 831.21 m, 703.81 m, 668.97 m [TMGH ⁺] ₂ [PheCOO ⁻] 1626 s, 1562 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w 1773.10, 1009.5, 976.4, 831.5, 702.4, 660.8 [TMGH ⁺] ₂ [TrpCOO ⁻] 1665 s, 1612 s, 1584 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w		<u>1688 m, 1566.36 sl</u>		
w, 831.21 m, 703.81 m, 668.97 m [TMGH*]2 [PheCOO*] 1626 s, 1562 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w 1373.10, 1009.5, 976.4, 831.5, 702.4, 660.8 { 1373.10, 1009.5, 976.4, 831.5, 702.4, 660.8 [TMGH+]2 [TrpCOO*] 1665 s, 1612 s, 1584 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w		1373.14 m, 1316.54 m, 1297.16 m, 1009.73 w, 979.28		
[TMGH*]2 [PheCOO-] 1626 s, 1562 s (1606, 1575) (1606, 1575) (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w 11373.10, 1009.5, 976.4, 831.5, 702.4, 660.8 [TMGH+]2 [TrpCOO-] 1665 s, 1612 s, 1584 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w 1375.0, 1292.0, 829.5, 704.6		w, 831.21 m, 703.81 m, 668.97 m		
{1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w 1373.10, 1009.5, 976.4, 831.5, 702.4, 660.8 1373.10, 1009.5, 976.4, 831.5, 702.4, 660.8 11665 s, 1612 s, 1584 s {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w 1375.0, 1292.0, 829.5, 704.6	[TMGH ⁺] ₂ [PheCOO ⁻]		1626 s, 1562 s	
(1400 s, 1300 m, 1024 w, 1010 w, 9/8 w, 831 m, 701 m, 666 w) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w [1373.10, 1009.5, 976.4, 831.5, 702.4, 660.8] [TMGH+]₂ [TrpCOO-] [IM665 s, 1612 s, 1584 s] {1663.30 s, 1654.20 s, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w		(1)(00 100)	{1666, 1575}	
m, boo w) 1690.9 m, 1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w [1373.10, 1009.5, 976.4, 831.5, 702.4, 660.8] [17MGH ⁺] ₂ [TrpCOO ⁻] [[1665 s, 1612 s, 1584 s]] [1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w [1375.0, 1292.0, 829.5, 704.6]		(1400 s, 1300	m, 1024 w, 1010 w, 978 w, 831 m, 701	
1690.9 m, 1506.7 s, 1500.8 s, 1550.0 s, 1546.3 s, 1535.5 m 1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w [1373.10, 1009.5, 976.4, 831.5, 702.4, 660.8] [17MGH*] ₂ [TrpCOO ⁻] [11665 s, 1612 s, 1584 s] {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w 1375.0, 1292.0, 829.5, 704.6]		<i>m, 666 w)</i>		
1373.10 m, 1307.90 m, 1292.0 m, 1009.5 w, 976.4 w, 831.5 m, 702.4 m, 660.8 w [1373.10, 1009.5, 976.4, 831.5, 702.4, 660.8] [TMGH+]2 [TrpCOO-] [[1666 s, 1575] (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w 1375.0, 1292.0, 829.5, 704.6		<u>1690.9 m, l</u>	1566.7 s, 1560.8 s, 1556.0 s, 1546.3 s,	
[15/5.10 m], 159/50 m], 1292.0 m], 1095.8 w] 831.5 m, 702.4 m, 660.8 w [1373.10, 1009.5, 976.4, 831.5, 702.4, 660.8] [TMGH*] ₂ [TrpCOO ⁻] [[1665 s, 1612 s, 1584 s]] {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w [1375.0, 1292.0, 829.5, 704.6]		1272 10 m 12	<u>1555.5 M</u> 107.00 m 1202.0 m 1000.5 m 076.4 m	
[TMGH+]2 [TrpCOO] [1373.10, 1009.5, 976.4, 831.5, 702.4, 660.8] [TMGH+]2 [TrpCOO] [[1665 s, 1612 s, 1584 s]] {1666, 1575} {1666, 1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) 1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w [1375.0, 1292.0, 829.5, 704.6]		13/3.10 m, 130/.90 m, 1292.0 m, 1009.5 w, 976.4 w,		
[TMGH+]2 [TrpCOO-] [[15]) .10, 100.7, 570.4, 571.3, 702.4, 600.6] [[1665], 1612 s, 1512 s, 1584 s] [[1665], 1612 s, 1584 s] [[1665], 1612 s, 1514 s] [[1666], 1575] [[160], 170] [[1663], 100 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) [[160], 160, 150, 160, 160 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w] [[170], 35, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w] [[1375.0, 1292.0, 829.5, 704.6]		331.3 m , 702.4 m , 600.8 w		
[1:0011]2[110000] {1666,1575} (1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) <u>1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s,</u> <u>1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w</u> 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w , 704.6 w, 660.8 w 1375.0, 1292.0, 829.5, 704.6	[TMCH+]. [TrpCOO-]	15/5.10, 1009.5, 9/0.4, 851.5, /02.4, 660.8 1665 c, 1612 - 1594 -0		
(1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666 w) <u>1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s,</u> <u>1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w</u> 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w 1375.0, 1292.0, 829.5, 704.6		1003 S, 1012 S, 1384 S (1666 1575)		
701 m, 1024 w, 1016 w, 276 w, 376 m, 701 m, 666 w) <u>1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s,</u> <u>1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w</u> 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w 1375.0, 1292.0, 829.5, 704.6		$(1400 \pm 1300 \text{ m} + 1024 \text{ w} + 1010 \text{ w} + 978 \text{ w} + 831 \text{ m})$		
1663.30 s, 1654.20 s, 1636.00 s, 1584.8 s, 1577.9 s, 1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1527.6 w 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w 1375.0, 1292.0, 829.5, 704.6		701 m 666 w)		
<u>1570.3 s, 1560.5 s, 1545.2 m, 1534.5 w, 1577.5 w</u> 1375.0 m, 1313.9 w, 1292.0 w, 1007.1 w, 985.2 w, 829.5 w, 704.6 w, 660.8 w		1663.30 s. 1654.20 s. 1636.00 s. 1584.8 s. 1577.9 s.		
1375.0 w 1203.0 w 1207.0 w 1207.0 w 1207.0 w 829.5 w, 704.6 w 660.8 w 1375.0, 1292.0, 829.5, 704.6		1570.3 s. 1560.5 s. 1545.2 m. 1534.5 w. 1527.6 w		
829.5 w , 704.6 w , 660.8 w 1375.0, 1292.0, 829.5, 704.6		1375.0 m. 13	313.9 w. 1292.0 w. 1007.1 w. 985.2 w.	
1375.0, 1292.0, 829.5, 704.6			829.5 w, 704.6 w, 660.8 w	
		1	375.0, 1292.0, 829.5, 704.6	

a: characteristic bands of ammonium carbamate after comparison with ammonium chloride. b: Not present within 5 $\rm cm^{-1}$ interval.

FTIR: carbamate and carboxylate characteristic bands of the prepared DBU based compounds

Compounds	FTIR	FTIR		
compounds	cm-1	cm-1		
(DDIIIIt based	-			
(DBUH' based	COO-	NCOO-		
carbamates)				
	Zwiterionic	(NCOO- ammonium carbamate ^a [22])		
	aminoacid)	{ <i>NCOO</i> - from carbamate based amino-		
	COO-II	esters [13]: from carbamate based TSILs		
		[17]}		
	Bands not present in the spectra of			
		TMGH ⁺ . AA ⁻ [24] ^b		
[DBUH ⁺] ₂ [GlvCOO ⁻]		1606 s. 1592 s		
	{1666, 1575}			
	(1400 s, 1300	m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666		
	w)			
	<u>1687.00 m, 1603.00 m, 1593.00 m</u>			
	1572.51 w, 1324.78 m, 1301.59 w, 1008.91 w, 984.43 w,			
	331.37 W, 704.11 W			
[DBUH ⁺], [AlaCOO ⁻]	15/2.31, /04.11 1621 s 1589 s			
[2201] [2 [1140000]	{1666, 1575}			
	(1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666			
	w)			
	<u>1691.43 m, 1641,00 s, 1589.56 s, 1566.43 s, 1519.76 m</u>			
	1365.18 m, 1326.57 m, 1309.24 m, 1012.19 w, 986.89 w,			
	833.55 W, 706.15 W, 666.11 W			
[DBUH ⁺], [ValCOO ⁻]	1520.37, 635.33, 700.13 1612 s 1586 s 1566 s			
		{1666, 1575}		
	(1400 s, 1300)	m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666		
	w)			
	<u>1690.84 m, 1632.50 m, 1586.60 s, 1583.00 m</u>			
	1371.73 m, 1	326.50 m, 1308.72 w, 1009.02 w, 985.20 w,		
	831.32 w, 703.71 w, 664.86 w			
[DBUH ⁺] ₂ [LeuCOO ⁻]		1610 s. 1583 s		
[]		{1666, 1575}		
	(1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m, 666			
	w)			
	<u>1692.22 m, 1625.47 s, 1614.05 m, 1603.19 m, 1568.39 m,</u>			
	$\frac{1563.17 \text{ m}}{1206.21 \text{ m}} = 1000.42 \text{ m} \cdot 004.41 \text{ m}$			
	13/1.25 III, 1323.20 III, 1270.31 III, 1009.42 W, 984.41 W, 831 38 w 703 A0 w 660 A3 w			
[DBUH ⁺], [PheCOO-]	1626 s 1562 s			
		{1666, 1575}		
	(1400 s, 130	00 m, 1024 w, 1010 w, 978 w, 831 m, 701 m,		
	666 w)			
	<u>1690.9 m, 1651.3 s, 1643.6 s, 1631.8 s, 1619.4 s, 1602.9 s,</u>			
	<u>1585.4 s, 1578.1 s, 1571.6 s, 1566.2 s, 1560.6 s, 1555.9 s,</u>			
	<u>1373 1 m 1322 7 s 1307 3 m 1202 0 m 1000 3 m 070 5</u>			
	w. 829.5 w. 702 4 w 663 0 w			
	[1373.1, 1292.0, 1009.3, 970.5, 829.5, 663.0]			
[DBUH ⁺] ₂ [TrpCOO ⁻]		1665 s, 1612 s, 1584 s		
		{1666, 1575}		
	(1400 s, 1300 m, 1024 w, 1010 w, 978 w, 831 m, 701 m,			
	$\begin{array}{c} 666 \text{ w} \\ 1602 \text{ Am} & 1630 \text{ g} \approx 1620 \text{ g} \approx 1595 \text{ g} \approx 1572 \text{ A} \approx 1556 \text{ g} \approx 1572 \text{ g} \approx 1556 \text{ g} \approx 1556 \text{ g} \approx 1572 \text{ g} \approx 1556 \text{ g} \approx 1572 \text{ g} \approx 1556 \text{ g} \approx 1572 \text{ g} \approx 1556 \text{ g} $			
	1536.7 m			
	1370.8 m, 1324.2 s, 1295.9 m, 1008.6 w, 968.2 w, 830.6 w,			
	703.1 w, 662.7 w			
	1370.8, 1295.9			

a: characteristic bands of ammonium carbamate after comparison with ammonium chloride. b: within 5 $\rm cm^{-1}$ interval.



DSC Thermograms of [TMGH]₂[PheCO₂] and [DBUH]₂[PheCO₂]

UV-Visible spectra



The UV/Vis spectra were collected using a Cary 100 Bio spectrometer and 10 mm quartz absorbance cells.

Compound	Solvent	Concentration /M	λ _{max} /nm
[TMGH ⁺] ₂ [TrpCOO ⁻]	Acetone	2.41 × 10 ⁻⁵	207
[DBUH ⁺] ₂ [TrpCOO ⁻]	Ethanol	2.35 × 10 ⁻⁵	220, 280
[DBUH⁺]₂[PheCOO ⁻]	Ethanol	3.37 × 10 ⁻⁵	211
[DBUH ⁺] ₂ [LeuCOO ⁻]	DMSO	6.66 × 10 ⁻³	259