

Table 2S Reported Schiff bases and their Ln(III) complexes along with different microbes used for antibacterial activity

Sr. No.	Ln(III) ions	Schiff bases	Gram positive bacteria	Gram negative bacteria	Ref.
			G (+)	G (-)	
1.	Eu(III), Tb(III), Gd(III)	2,2'-(thiophene-2,5-diylbis(methaneylylidene))bis(azaneylylidene)diphenol (H₂L₁)	SA-ATCC25923, EF-ATCC29212	EC-ATCC25922, KP-ATCC700603, PA-ATCC27853	57-59
2.	Pr(III), Nd(III), Sm(III)	2-(5-bromo-2-hydroxybenzylideneamino)pyridin-3-ol (H₂L₂)	-	EC	54
3.	Pr(III), Nd(III)	(HL₃)	SA, MRSA, EF	EC, PA, SE	55
4.	La(III), Ce(III), Nd(III)(III), Dy(III)	4-(benzo[d]thiazol-2-ylamino)-3-((benzo[d]thiazol-2-ylimino)methyl)-2H-chromen-2-one (L₄)	SA-ATCC13565, BS-DSM1088	EC-ATCC10536, KP-ATCC10031	65
5.	Dy(III)	(2E,N'E)-N'-(5-bromo-2-hydroxybenzylidene)-2-(hydroxyimino)propanehydrazide (H₂L₅)	SA, SAI, BS, ML	EC	66
6.	La(III), Pr(III), Nd(III), Sm(III), Eu(III), Gd(III), Tb(III), Dy(III), Er(III)	(E)-N'-(3,5-di-tert-butyl-2-hydroxybenzylidene)picolinohydrazide (H₂L₆)	SA, MRSA, EF	KP, EC, SE	70, 71
7.	La(III), Nd(III), Er(III), Gd(III), Dy(III)	(E)-4-((2,3-dihydrobenzo[d]thiazol-2-ylimino)methyl)-1,5-dimethyl-2-phenyl-1H-pyrazol-3(2H)-one (L₇)	SA, BS	EC, KP	72
8.	Nd(III), Tb(III), Dy(III)	(E)-2-((p-tolylimino)methyl)phenol (HL₈)	SA-ATCC29213, SA-ATCC33591	EC-ATCC25922, PA-ATCC 27853	74
9.	Yb(III), Pr(III), Er(III)	(N2, N3-bis) anthracen-9-ylmethylene pyridine-2, 6-diamine (L₉)	SA	PA	75
10.	Nd(III), Sm(III), Tb(III)	(E)-6-(hydroxymethyl)-N'-((6-methoxypyridin-2-yl)methylene)picolinohydrazide (H₂L₁₀)	-	PSy	78
11.	La(III), Er(III), Yb(III)	N1-(diphenylmethylene)naphthalene-1,8-diamine (L₁₁)	BS	EC	83
12.	Nd(III), Sm(III), Gd(III)	(E)-6-ethoxy-N-((E)-3-(furan-2-yl)allylidene)benzo[d]thiazol-2-amine (L₁₂)	SA-ATCC25923, BS-RCMB015	EC-ATCC25922, PV-RCMB004	85
13.	La(III), Pr(III), Nd(III), Sm(III),	(E)-N'-(5-chloro-2-hydroxybenzylidene)-2-	EF, SA, MRSA	EC, KP, SE	90

	Eu(III), Gd(III), Tb(III), 0Dy(III), Er(III))	fluorobenzohydrazide (H₂L₁₃) (E)-N'-(5-bromo-2- hydroxybenzylidene)-2- fluorobenzohydrazide (H₂L₁₄)			
14.	Ce(III), Nd(III), Pr(III)	(N,N'E,N,N'E)-N,N'-(1,3- phenylenebis(methan-1-yl-1- ylidene))bis(5-nitrobenzo [d] thiazol- 2-amine) (L₁₅), (E)-5-methyl-N-(3-((E)-(4- methylthiazol-2-ylimino) methyl)benzylidene)thiazol-2-amine (L₁₆)	<i>SA, PBA</i>	-	92
15.	Yb(III), Er(III), La(III)	(2-(1-((8-aminonaphthalen-1 yl)imino)ethyl)cyclopenta-2,4-dien- 1-yl)(cyclopenta-2,4-dien-1-yl)iron (L₁₇), (2-(1-((1-carboxyethyl)imino) ethyl)cyclopenta-2,4-dien-1-yl) (cyclopenta-2,4-dien-1-yl)iron) (HL₁₈)	<i>SA, BC, BS</i>	<i>EC, PA, NG, ST SF</i>	96-98
16.	Nd(III), La(III), Er(III), Gd(III), Dy(III)	((3a <i>E</i> ,7 <i>E</i>)-1,2,9,10- tetramethyl-3,8-diphenyl- 3,5,6,8,9,11-hexahydro-2 <i>H</i> dipyrazolo[3,4- <i>e</i> :4',3'- <i>h</i>][1,4] diazonine) (L₁₉)	<i>SA, BS</i>	<i>EC, KP</i>	100
17.	La(III), Yb(III), Er(III)	N ¹ -(diphenylmethylene) naphthalene- 1,8-diamine (L₁₁)	<i>BS</i>	<i>EC</i>	104
18.	La(III), Pr(III), Nd(III), Sm(III), Eu(III), Gd(III), Tb(III), Dy(III)	2,2'-(1 <i>E</i> ,1' <i>E</i>)-(1,2-phenylenebis(azan- 1-yl-1-ylidene))bis(methan-1-yl-1- ylidene))bis(4-nitrophenol) (H₂L₂₀)	<i>SA, MRSA, EF</i>	<i>SE, KP, EC</i>	107
19.	Er(III)	2,2'-(1 <i>E</i> ,1' <i>E</i>)-(ethane-1,2- diylbis(azan-1-yl-1- ylidene))bis(methan-1-yl-1- ylidene)diphenol (L₂₁)	<i>SA</i>	<i>EC</i>	110
20.	La(III), Ce(III)	2-(((3-(1 <i>H</i> -benzo[d]imidazol-2- yl)phenyl)imino)methyl)phenol (HL₂₂) 4-(((3-(1 <i>H</i> -benzo[d]imidazol-2- yl)phenyl)imino)methyl)benzene-1,3- diol (HL₂₃)	<i>SA-ATCC25923, LM-ATCC19115</i>	<i>EC-ATCC25922, PA-ATCC 27583</i>	111

		2-(((4-(1H-benzo[d]imidazol-2-yl)phenyl)imino)methyl)phenol (HL₂₄)			
		4-(((4-(1H-benzo[d]imidazol-2-yl)phenyl)imino)methyl)benzene-1,3-diol (HL₂₅)			
21.	Gd(III), Pr(III)	2,2'-(1Z,1'Z)-(1,3-diphenylpropane-1,3-diylidene)bis(azan-1-yl-1-ylidene)dibenzoic acid (H₂L₂₆)	SA, BS	ST, EC	115
22.	La(III), Sm(III), Eu(III), Gd(III), Tb(III), Dy(III)	(E)-N'-(2-hydroxybenzylidene)picolinohydrazide (H₂L₂₇)	SA, MRSA, EF	SE, KP, EC	116
23.	Yb(III), Nd(III), Dy(III)	6,6'-(1E,1'E)-(2,2'-azanediylbis(ethane-2,1-diyl)bis(azan-1-yl-1-ylidene))bis(methan-1-yl-1-ylidene)bis(2-methoxyphenol) (H₂L₂₈)	SA, EF	EC, ST	117
		1,1'-(1E,1'E)-(2,2'-azanediylbis(ethane-2,1-diyl)bis(azan-1-yl-1-ylidene))bis(methan-1-yl-1-ylidene)dinaphthalen-2-ol (H₂L₂₉)			
24.	Nd(III), Dy(III), Tb(III), Eu(III) Yb(III)	4-((2-hydroxynaphthalen-1-yl)methyleneamino)benzenesulfonamide (HL₃₀)	SA	EC, KP, AB, PA	119
25.	Er(III), Pr(III), Yb(III)	(N ³ E,N ⁴ E)-N ³ ,N ⁴ -bis(anthracen-9-ylmethylene)pyridine-3,4-diamine (L₃₁)	SA, BS	EC, PA	120
26.	La(III), Nd(III), Eu(III)	2-carboxybenzaldehyde N(4)-phenylthiosemi carbazone (HL₃₂) 2-carboxybenzaldehyde N(4)-(4-chlorophenyl) thiosemicarbazone (HL₃₃)	SA-ATCC25923	EC-ATCC25922, ST-ATCC 14028, KP-ATCC 2146, KP-ATCC 1705	121
27.	La(III), Pr(III), Nd(III), Sm(III), Eu(III), Gd(III), Dy(III), Er(III)	(¹ E,N'E)-2-fluoro-N'-(furan-2-ylmethylene) benzohydrazonic acid (HL₃₄)	SA, SPy, EF	EC, KP, PM, SE, PA	122, 123