

A NIR-II fluorescent probe for articular cartilage degeneration imaging and osteoarthritis detection

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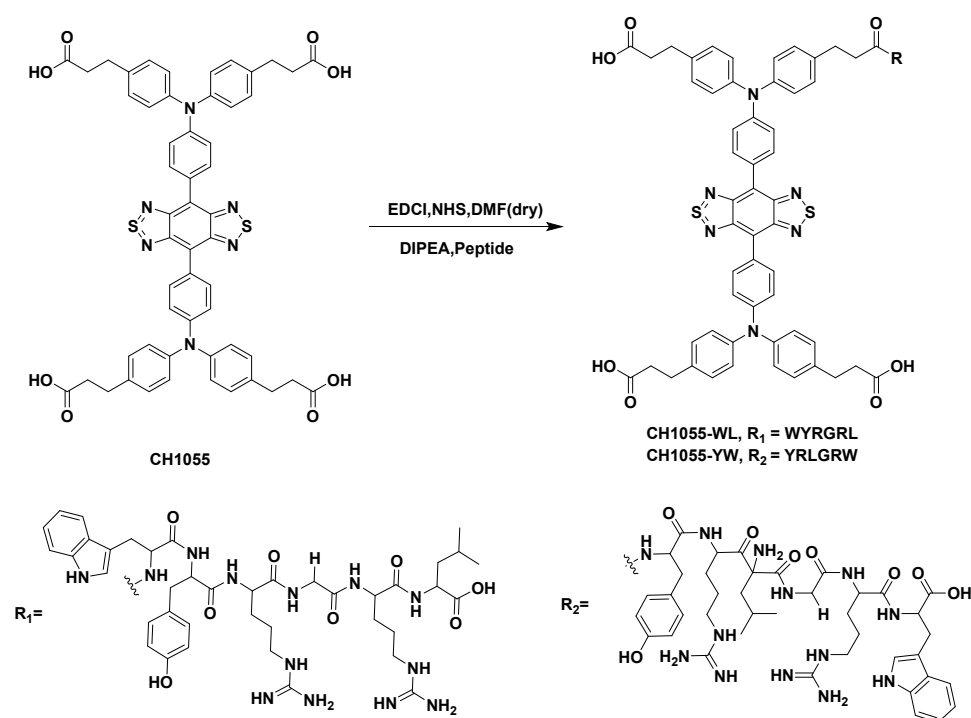


Figure S1. Synthesis of **CH1055-WL** and **CH1055-YW**.

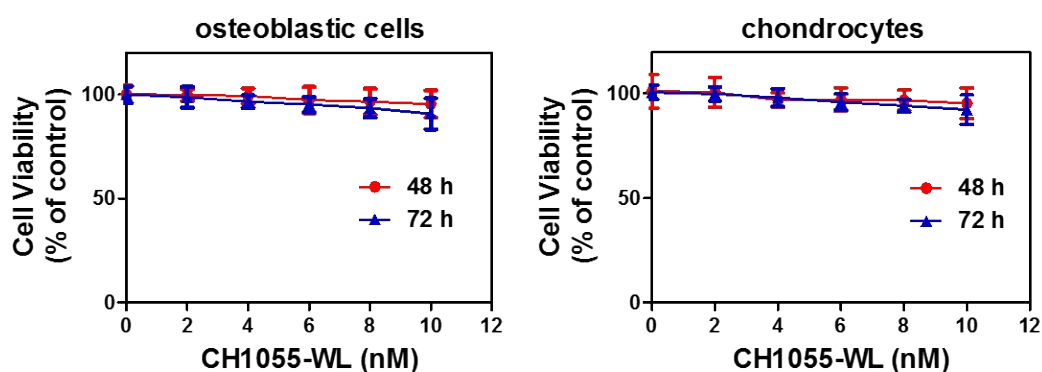


Figure S2. In vitro cell viability of human osteoblastic cells (hFOB1.19) and chondrocytes isolated from articular cartilage of 12-weeks-old Japanese white rabbit

(male). Cells were incubated with **CH1055-WL** (0 to 10nM) for 48 and 72 h. Data was presented as mean $\pm$ SD, (n=5).

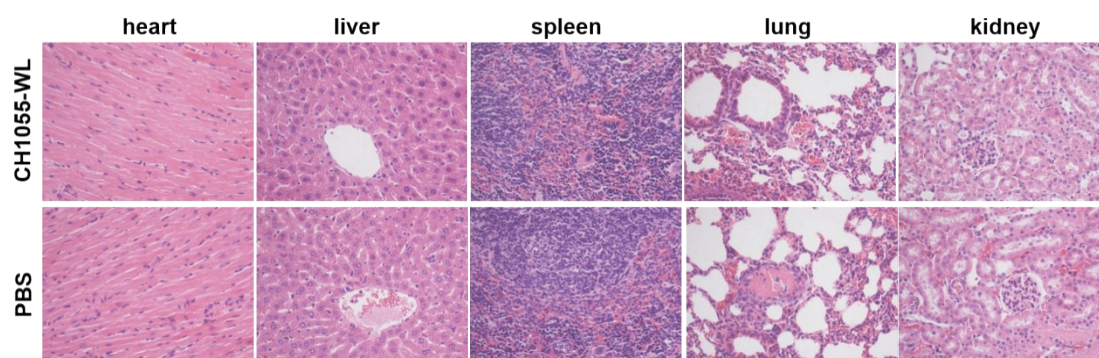
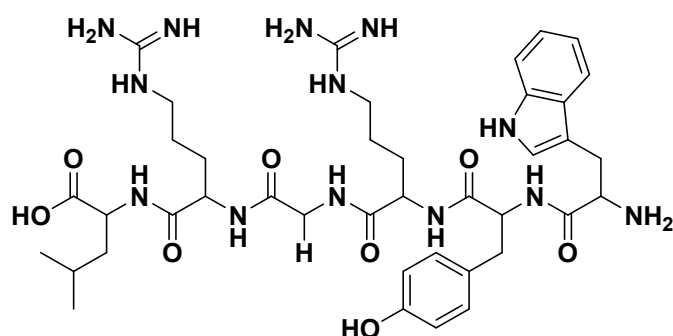


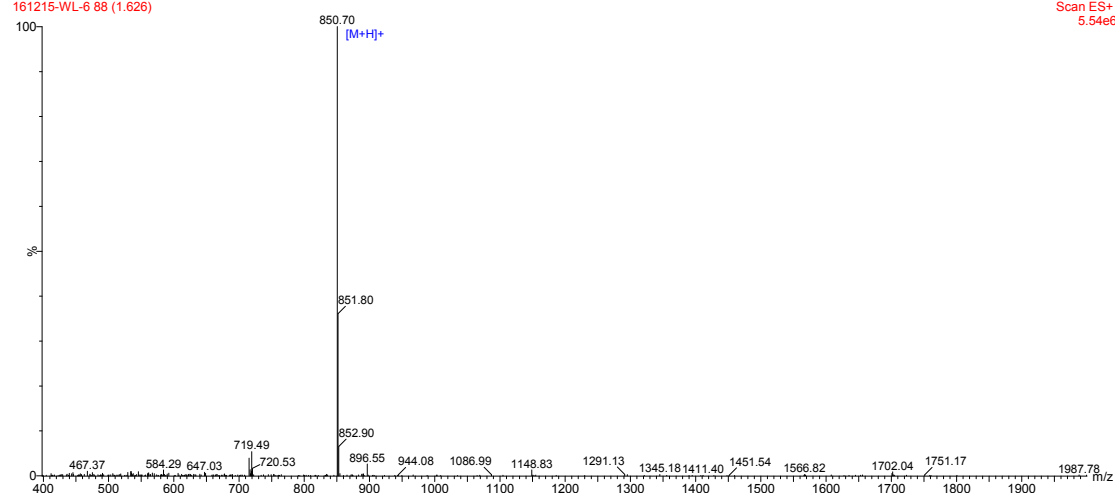
Figure S3. H&E stain of major organs harvested from mice 24h post-injected of **CH1055-WL** or PBS.

MS Spectra for peptide R1(WYRGRL)



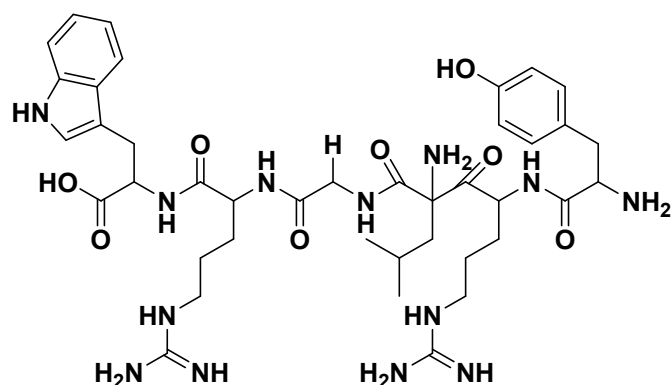
15-Dec-2016
15:19:31
WYRGRL P161125-WJ385874 MW:850.00
161215-WL-6 88 (1.626)

Probe: ESI
Conc: 50v
Desolvation Temp: 350
Capillary: 3.00KV
Extractor: 5v
Gas Flow: 350
Scan ES+
5.54e6



Expected M.W. 849.96. Measured M.W. 850.70

MS Spectra for peptide R2(YRLGRW)



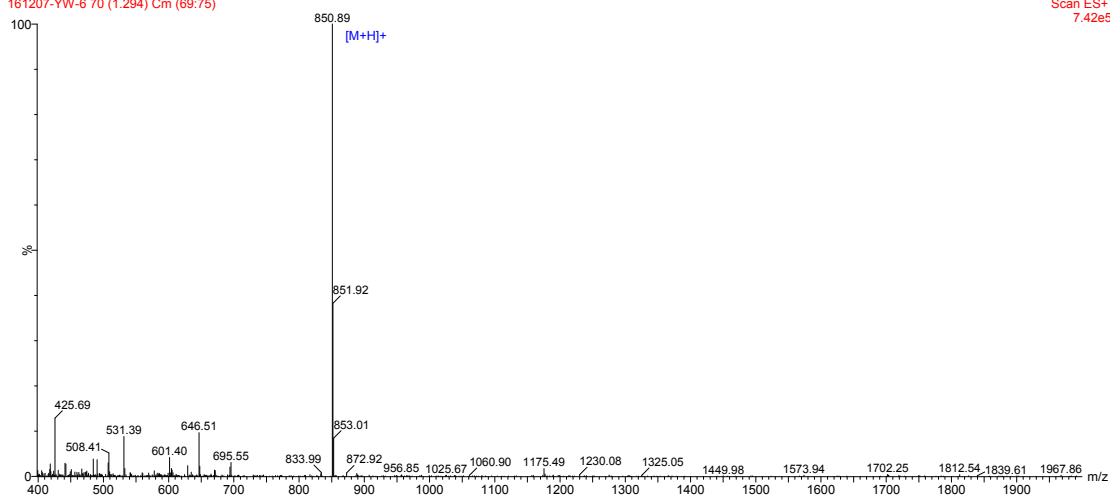
07-Dec-2016

12:24:04

YRLGRW P161125-WJ548953 MW:850.00

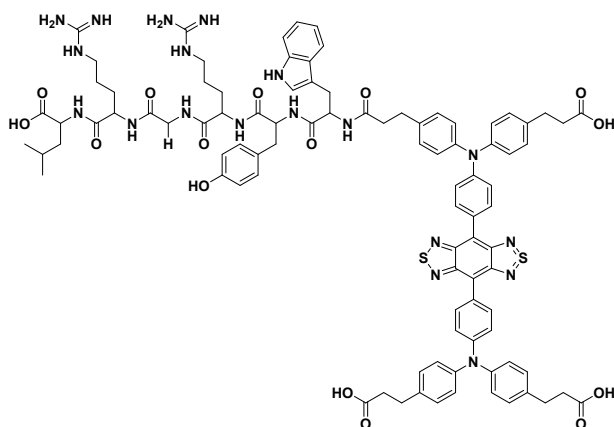
161207-YW-6 70 (1.294) Cm (69.75)

Scan ES+
7.42e5

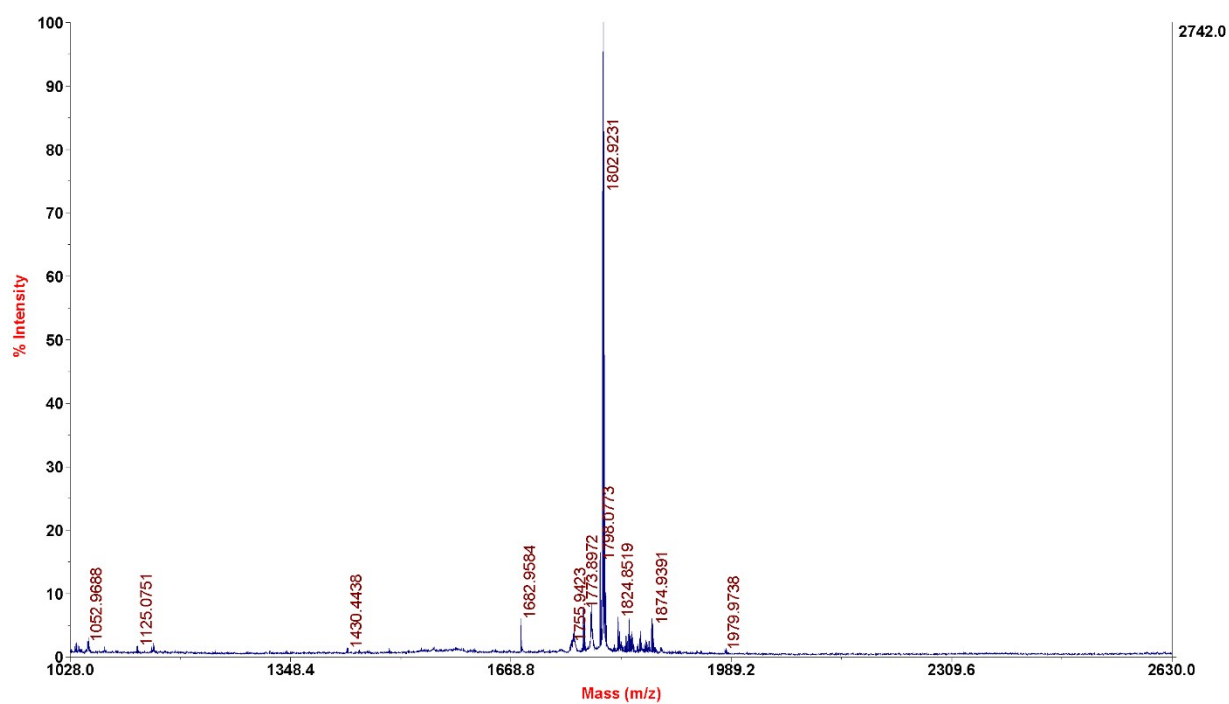


Expected M.W.849.46. Measured M.W. 850.89

MALDI-TOF-MS for CH1055-WL

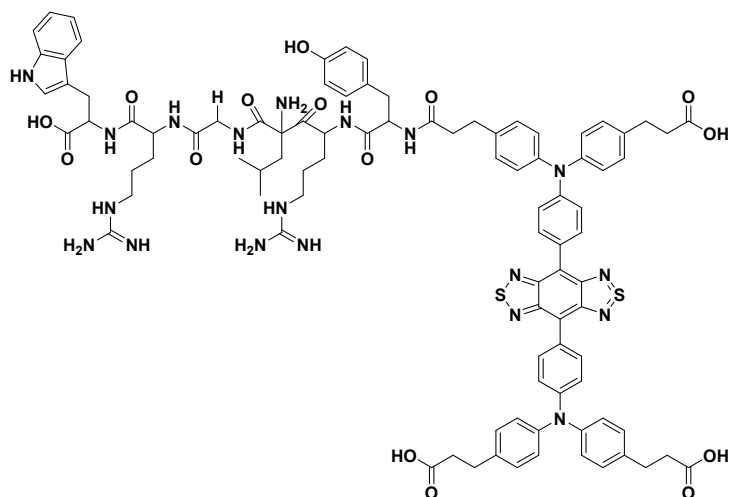


<<2>> TOF/TOF?Reflector Spec #1[BP = 1802.9, 2742]



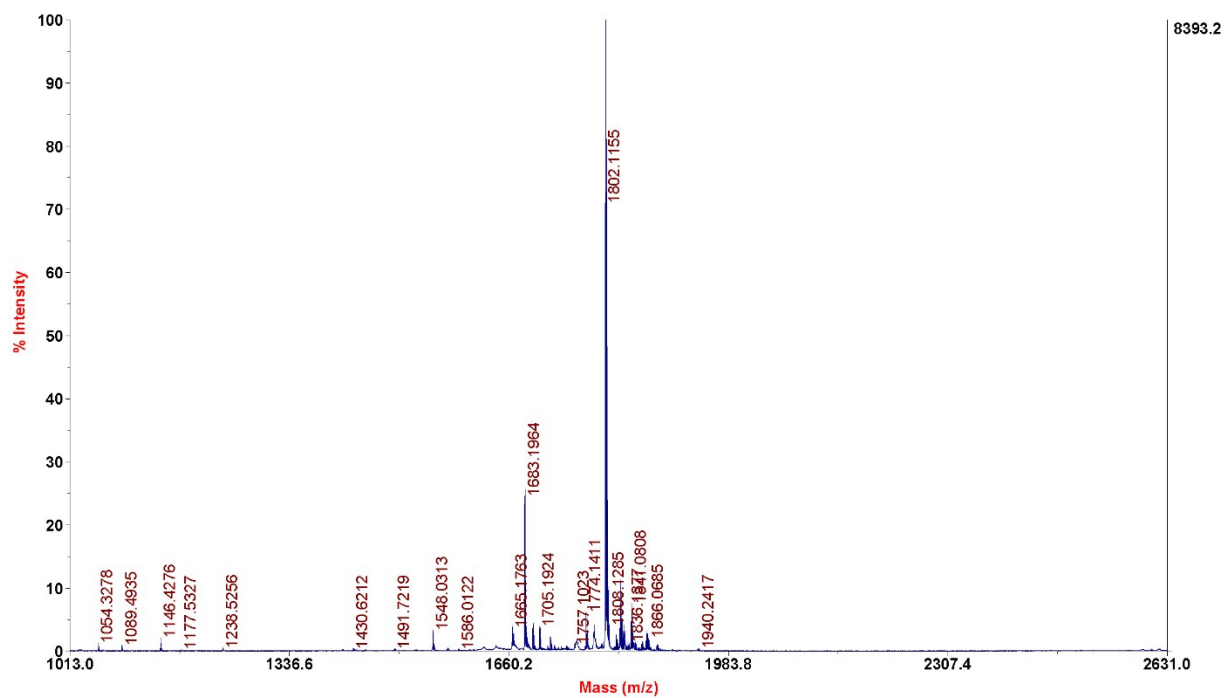
CH1055-WL. Expected M.W: 1802.08 ([M+H⁺]), Measured M.W: 1802.92

MALDI-TOF-MS for CH1055-YW



Applied Biosystems 4700 Proteomics Analyzer T2183

<<2>> TOF/TOF?Reflector Spec #1[BP = 1802.1, 8393]



CH1055-YW. Expected M.W: 1802.08 ($[M+H]^+$), Measured M.W: 1802.12.