



Product Data Sheet

Product Name:	JAG-1 (188-204), Jagged-1 (188-204), Notch Ligand	
Catalog Number:	61298 (1 mg)	Lot Number: See label on vial
Sequence:	H-Cys-Asp-Asp-Tyr-Tyr-Tyr-Gly-Phe-Gly-Cys-Asn-Lys-Phe-Cys-Arg-Pro-Arg-OH (3-letter code) CDDYYYGFGCNKFCRPR (1-letter code)	
Molecular Weight:	2107.4	
Peptide Purity:	>95%	
Appearance:	Lyophilized white powder	

Peptide Reconstitution: Using H₂O, reconstitute by adding 100 µl to 1 mg JAG-1 peptide.

Storage: JAG-1 peptide is shipped at ambient temperature. Upon receipt, store lyophilized peptide at –20°C or lower. Reconstituted peptide can be aliquoted and stored at –20°C or lower.

Description: This peptide is a fragment of the JAG-1 protein. JAG-1 is Notch ligand, a peptide that is the most conspicuously expressed ligand in skin. JAG-1 induces epidermal maturation. Exposing submerged keratinocytes monolayers to JAG-1 with elevated calcium concentration produces stratification with loricrin expression and NF-κB activation. Ref: Nickoloff, B. et al. *Cell Death Different.* **9**, 842 (2002).

Additional Information: Listed below are relevant information that may provide a guideline on how to use this product. End users will have to adapt to their own specific applications.

The 17-mer JAG-1 peptide (CDDYYYGFGCNKFCRPR), corresponding to amino acids 187-203 of human Jagged1 (accession number: NP_000205), was described previously and was shown to active notch signaling in keratinocytes and myeloid cell lines (36,37). The scrambled peptide (SC)-JAG-1 (RCGPDCFDNYGRYKYCF) was used as a negative control. Both peptides were synthesized by Anaspec (San Jose, CA, USA). Peptides were dissolved in DMSO (50 mM), aliquoted, and stored at -20°C. Further dilutions to 100 µM were carried out at the time of the experiments-[Sainson, R.C.A. et al FASEB J. 19, 1027 \(2005\).](#)

The DAPT (Sigma-Aldrich, St. Louis, MO, USA) and Jag-1 (AnaSpec, San Jose, CA, USA) were both dissolved in dimethyl sulfoxide (DMSO). Tracheas were excised sterilely and cultured in 1:1 mix of Dulbecco's modified Eagle's medium and Ham's F-12 medium (DMEM/F12) containing 120 mg/mL 5-FU and 10% fetal bovine serum (FBS) for 12 h at 37 °C. Following removal of 5-FU, tracheas were cultured in DMEM/F12 containing 10% FBS with or without 5 µM DAPT (Sigma-Aldrich) or 40 µM Jag-1 peptide (AnaSpec). The tracheas cultured in DMEM/F12 containing DMSO alone were used as vehicle controls for the DAPT- or Jag-1-treated group-[Ma, X-B. et al. Cell Proliferation 42, 15 \(2009\)](#)

Published Citations:

Sainson, R.C.A. et al *FASEB J.* **19**, 1027 (2005).
Ma, X-B. et al. *Cell Proliferation* **42**, 15 (2009)

Related Products:

Name	Cat #	Size
Scrambled Jag1 RCGPDCFDNYGRYKYCF	64239	1 mg
Notch 1 (1735-1752) (VLLFFVGCGVLLSRKRRR)	62914	1 mg

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