

Human ADAM10, His-Tag

Recombinant Human A Disintegrin and Metalloproteinase Domain 10, His-Tag

Synonyms: Kuz, AD10, MADM, CD156c, HsT18717, ADAM metalloproteinase domain 10, A disintegrin and metalloproteinase domain 10, Mammalian disintegrin-metalloprotease, Kuzbanian protein homolog, CDw156, ADAM 10, ADAM10.

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order #	Lot #	Expiry Date
2 µg	4008.950.002		
10 µg	4008.950.010		
1 mg	4008.950.199		

Please enquire for bulk quantities and other vial sizes

Description

Human recombinant ADAM10, His-Tag derived from *E. Coli* consists of the extracellular domain minus the signal peptide and pro-sequence, fused to N-terminal His-Tag, which results in a single, non-glycosylated protein with a molecular mass of 55 kDa and 459 amino acids (214-672). Members of the ADAM family are cell surface proteins with a unique structure possessing both potential adhesion and protease domains. ADAM10 and ADAM17 are the best characterized members of this family. ADAM10 cleaves many proteins including TNF-alpha and E-cadherin. It cleaves the membrane-bound precursor of tnf-alpha at 76-ala-|-val-77 to its mature soluble form. For several other cell-surface proteins, including ephrin-a2, ADAM10 is in charge for the proteolytic release and for constitutive and regulated alpha-secretase cleavage of amyloid precursor protein. Furthermore, it is involved in the normal cleavage of the cellular prion protein. ADAM10 is involved in the cleavage of the adhesion molecule L1 (Neural cell adhesion molecule L1, NCAM-L1, 4710.952.xyz) at the cell surface and in the release of membrane vesicles, suggesting a vesicle-based protease activity. It controls the proteolytic processing of notch and mediates lateral inhibition during neurogenesis. ADAM10 is highly conserved, with 97% amino acid identity between mouse, rat, bovine and human.

- **Biological Activity** see below
- **Source** *E. Coli*
- **Purity** ≥ 95 % (SDS-PAGE)
- **Endotoxin level** ≤ 0.1ng/µg (≤ 1EU/µg)
- **Buffer** Tris (20mM, pH 8), EDTA (1mM) and 50% Glycerol*
- **Physical state** Sterile filtered colorless solution with 0.14mg/ml

Biological Activity

This product has been found to show the desired biological activity. For instance in an assay using the cleavage of the fluorogenic peptide substrate MCA-Lys-Pro-Leu-Gly-Leu-DPA-Ala-Arg-NH₂.

Stability

Recombinant Human ADAM10 His-Tag liquid can be stored at 4°C if entire vial will be used within 2-4 weeks. For long term storage until the expiry date please store frozen at -20°C. If possible, we recommend to add a carrier protein (0.1% HSA, order number: [2835.955.xyz](#) or [2835.958.xyz](#), or BSA, order number: [2835.919.xyz](#)) and leave the working aliquots at the highest practical concentrations. **Please avoid repeated freeze-thaw cycles.**

Amino Acid Sequence

T TSAEKNTCQ LYIQTDHLFF KYYG TREAVI AQISSHV KAI DTIYQTTDFS GIRNISFMVK RIRINTTADE
 KDPTNPF RFP NIGVEKFLEL NSEQNHDDYC LAYVFTDRDF DDGVLGLAWV GAPSGSSGGI CEKSKLYSDG
 KKKSLNTGII TVQNYGSHVP PKVSHITFAH EVGHNF GSPH DSGTECTPGE SKNLGQKENG NYIMYARATS
 GDKLNNNKFS LCSIRNISQV LEKRRN NCFV ESGQPICGNG MVEQGE EDC GYS DQCKDEC CFDANQPEGR
 KCKLKP GKQC SPSQGPCCTA QCAFKSKSEK CRDDSDCARE GICNGFTALC PASDPKPNFT DCNRHTQVCI
 NGQCAGSICE KYGLEECTCA SSDGKDDKEL CHVCCMKMD PSTCASTGSV QWSRHFSGRT ITLQPGSPCN
 DFRGYCDVFM RCRLVDADGP LARLKKAI FS PELYENIAE

*The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.

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Usage: For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.

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