

# ADAM12, Human CellExp™, human recombinant

<b>CATALOG #:</b>	7239-10	10 µg
<b>ALTERNATE NAMES:</b>	ADAM12, MCMP, MLTN, MLTNA, MCMPLtna, Meltrin Alpha	
<b>SOURCE:</b>	HEK 293 cells (Arg 29 - Asp 513)	
<b>PURITY:</b>	≥ 95% by SDS-PAGE gel	

**MOL. WEIGHT:** The protein is fused with 6xHis tag at the C-terminus, has a calculated MW of 55.2 kDa (Pro) and 34 kDa (Mature). The predicted N-terminus is Arg 29. DTT-reduced Protein migrates as 23 kDa, 46 kDa and 65 kDa due to glycosylation, corresponding to the propeptide, the mature form and the pro form respectively.

**ENDOTOXIN LEVEL:** <1 EU/µg by LAL method

**FORM:** Lyophilized

**FORMULATION:** Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM NaCl, pH7.5. Normally trehalose is added as protectant before lyophilization.

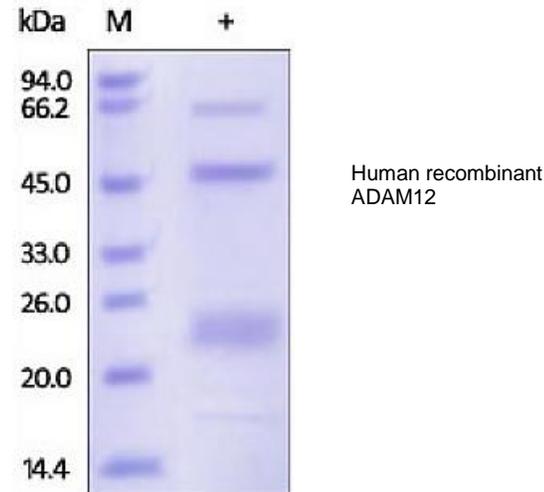
**STORAGE CONDITIONS:** Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

**DESCRIPTION:** A Disintegrin And Metalloprotease 12 (ADAM12) is also known as Meltrin-alpha and MCMP, is a member of the ADAM and MDC (Metalloprotease, Disintegrin, Cysteine-rich) protein family. Members of this family are membrane-anchored proteins structurally related to snake venom disintegrins, and have been implicated in a variety of biological processes involving in diverse processes such as asthma, development, angiogenesis and cancer through their activities in cell adhesion/fusion, membrane protein shedding, and signal transduction. Over 30 members have been identified and about half of them are active metalloproteases such as ADAM8, 9, 10, 12

and 17/TACE. ADAM12 has four Isoform, Isoform 1 is expressed in placenta and skeletal, cardiac, and smooth muscle. Isoform 2 seems to be expressed only in placenta or in embryo and fetus. Both forms were expressed in some tumor cells lines. ADAM12 Involved in skeletal muscle regeneration, specifically at the onset of cell fusion and also involved in macrophage-derived giant cells (MGC) and osteoclast formation from mononuclear precursors.

**BIOLOGICAL ACTIVITY:** Measured by its ability to cleave IGFBP-3. The bioactivity was measured in 100 µL reaction mixture containing 20 µg/ml of rhADAM12, 50 mM Tris, 10 mM CaCl<sub>2</sub>, 150 mM NaCl, pH 7.5.



## RELATED PRODUCTS:

- ADAM10 Antibody (Cat # 3201-100)

**FOR RESEARCH USE ONLY! Not to be used in humans.**