Rat ADAM17 Protein (His Tag)

Catalog Number: **80350-R08H**

General Information

Gene Name Synonym:

ADAM17

Protein Construction:

A DNA sequence encoding the rat ADAM17 (Q9Z1K9) (Met1-Asp563) was expressed with a polyhistidine tag at the C-terminus.

Source: Rat

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:

Measured by its ability to cleave a fluorogenic peptide substrate Mca-PLAQAV-Dpa-RSSSR-NH2 (Catalog # ES003).
The specific activity is >250 pmol/min/μg.

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Predicted N terminal: Pro 18

Molecular Mass:

The recombinant rat ADAM17 comprises 557 amino acids and predicts a molecular mass of 63 kDa. The apparent molecular mass of the recombinant protein is approximately 57 and 20 kDa in SDS-PAGE under reducing conditions due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

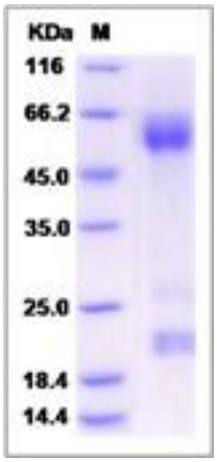
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

ADAM17 is a member of the ADAM protein family of disintegrins and metalloproteases. ADAM17 is ubiquitously expressed in the human colon, with increased activity in the colonic mucosa of patients with ulcerative colitis, a main form of inflammatory bowel disease. The expression of ADAM17 may be inhibited by ethanol. It is involved in the processing of tumor necrosis factor alpha (TNF-α) at the surface of the cell, and from within the intracellular membranes of the trans-Golgi network. ADAM17 also plays a role in the release of a diverse variety of membrane-anchored cytokines, cell adhesion molecules, receptors, ligands, and enzymes. ADAM17 may play a prominent role in the Notch signaling pathway, during the proteolytic release of the Notch intracellular domain (from the Notch1 receptor) that occurs following ligand binding.

References

1.Poghosyan. et al., 2002, J Biol Chem. 277 (7): 4999-5007.
2.Li Y. et al., 2006, Blood. 108 (7): 2275-9.
3.Peiretti. et al., 2003, J Cell Sci. 116 (10): 1949-57.