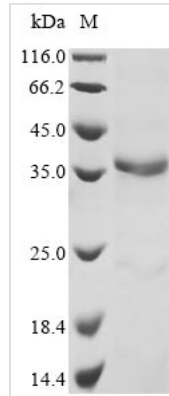




Recombinant Mouse ADAM DEC1 (Adamdec1)

Product Code	CSB-EP874167MO
Abbreviation	Recombinant Mouse Adamdec1 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q9R0X2
Form	Liquid or Lyophilized powder
Storage Buffer	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	NEDLLQGQKYIGLFLVLDNAYYKLYNGNVTQMRTFLFKVLNLLNMIYKTINIQVS LVGMEIWSDQDKIKVEPNLGATFTHFMRWHYSNLGKRIHNHAQLLSGASFRH GRVGMAAGNSFCTTSSVSVIEAKKKNNVALVALMSHELGHALGMKDVPYYTK CPSGSCVMNQYLSSKFPKDFSTVSRSHFQGFLSSRNARCLLLAPDPKNIKPT CGNQVLDVGEECDGCSPEECTNLCCEPLTCRLKSQPDCEASNHITE
Research Area	Biochemicals
Source	E.coli
Target Names	Adamdec1
Expression Region	209-467aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	34.9 kDa
Protein Length	Full Length of Mature Protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Recombinant Mouse ADAM DEC1 (Adamdec1) is expressed in *E. coli* and contains the full length of the mature protein, spanning amino acids 209 to 467. The protein comes with an N-terminal 6xHis-tag that helps with purification and detection. SDS-PAGE analysis confirms the product's purity exceeds 90%, which appears to make it suitable for various research applications.

ADAM DEC1 belongs to the ADAM (a disintegrin and metalloprotease) protein family. These proteins seem to be involved in several cellular processes, including cell signaling and adhesion. This particular protein likely plays an important role in regulating extracellular matrix composition and may be significant in studies related to tissue remodeling and repair. Understanding how it works could be crucial for advancing research in cell biology and related fields.

Potential Applications

Note: The applications listed below are based on what we know about this protein's biological functions, published research, and experience from experts in the field. However, we haven't fully tested all of these applications ourselves yet. We'd recommend running some preliminary tests first to make sure they work for your specific research goals.

1. Protein-Protein Interaction Studies Using His-Tag Pull-Down Assays

The N-terminal 6xHis-tag on this recombinant mouse ADAM DEC1 protein allows for nickel-affinity purification and pull-down experiments to identify potential binding partners. Researchers can attach the His-tagged protein to nickel-coated beads or columns, then incubate with cell lysates or purified protein libraries to capture interacting molecules. Mass spectrometry or Western blotting can then analyze the captured complexes to identify novel ADAM DEC1 interaction partners. This approach may be particularly valuable for studying the molecular mechanisms that underlie ADAM DEC1 function in cellular processes.

2. Antibody Development and Validation

The high purity (>90%) and defined expression region (209-467aa) suggest this recombinant protein could work well as an immunogen for generating specific antibodies against mouse ADAM DEC1. The protein can immunize rabbits or mice for polyclonal antibody production, or serve as an antigen for monoclonal



antibody screening. The purified protein also acts as a positive control for validating antibody specificity in Western blotting, ELISA, and immunoprecipitation experiments targeting endogenous ADAM DEC1 in mouse tissues or cell lines.

3. Biochemical Characterization and Protein Stability Studies

This recombinant ADAM DEC1 protein can be used for comprehensive biochemical analysis. This includes determining optimal storage conditions, pH stability, thermal stability, and buffer compatibility. Dynamic light scattering, differential scanning fluorimetry, and size exclusion chromatography can help characterize the protein's biophysical properties. These studies provide essential information for optimizing experimental conditions and understanding how the protein behaves in various research applications.

4. ELISA-Based Quantitative Assays

The His-tagged recombinant protein can work as a standard or capture antigen in enzyme-linked immunosorbent assays (ELISA) for quantifying ADAM DEC1 levels in biological samples. The protein can be attached to ELISA plates either directly or through anti-His antibodies, which enables development of sandwich or competitive ELISA formats. This application appears particularly useful for studying ADAM DEC1 expression patterns in different mouse tissues, cell types, or experimental conditions in research settings.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.