Mouse PLAUR / CD87 / uPAR Protein (His Tag)

Catalog Number: **50160-M08H**

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

Cd87; u-PAR; uPAR

Protein Construction:

A DNA sequence encoding the extracellular domain of mouse PLAUR (NP_035243.1) precursor (Met 1-Thr 297) was expressed, fused with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 97 % as determined by SDS-PAGE

Bio Activity:

Measured by its ability to bind with uPA-His (Cat:10815-H08H) in a functional ELISA.

Endotoxin:

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

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Leu 24

Molecular Mass:

The recombinant mouse PLAUR comprises 285 amino acids and has a predicted molecular mass of 31.4 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rmPLAUR is approximately 50-60 kDa 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

Storage:

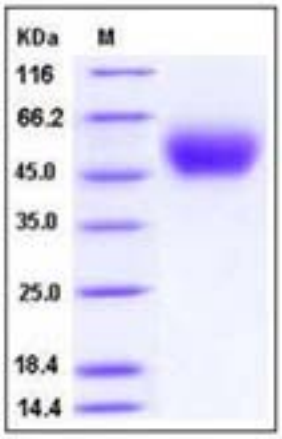
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Urokinase plasminogen activator (uPA) and/or its receptor (uPAR) are essential for metastasis, and overexpression of these molecules is strongly correlated with poor prognosis in a variety of malignant tumours. uPAR and uPA levels in both resected tumor tissue and plasma are of independent prognostic significance for patient survival in several types of human cancer. This system has classically been thought to drive tumor progression by mediating directed extracellular proteolysis on the surface of migrating or invading cells, and intervening with this proteolysis by targeting uPAR has been proposed to represent a novel approach for inhibiting tumor progression. uPAR, also known as PLAUR or CD87, has been implicated in the growth, metastasis, and angiogenesis of several solid and hemotologic malignancies. uPAR is a highly glycosylated, 55-60kDa integral membrane protein linked to the plasma membrane by a glycosylphosphatidylinositol (GPI) anchor. It is part of a cell surface system that also consists of the serine protease uPA and several specific inhibitors (plasminogen activator inhibitors 1 and 2). Additionally, the analysis of CD87 (urokinase-type plasminogen activator receptor - uPAR) expression has a potential role in the diagnostic or prognostic work-up of several hematological malignancies, particularly acute leukemia and multiple myeloma.

References

1.Romer J, *et al.* (2004) The urokinase receptor as a potential target in cancer therapy. Curr Pharm Des. 10(19): 2359-76. 2.Bn MC, *et al.* (2004) CD87 (urokinase-type plasminogen activator receptor), function and pathology in hematological disorders: a review. Leukemia. 18(3): 394-400. 3.Pillay V, *et al.* (2007) The urokinase plasminogen activator receptor as a gene therapy target for cancer. Trends Biotechnol. 25(1): 33-9.