Rat EpCAM / TROP-1 / TACSTD1 Protein (Fc Tag)

Catalog Number: **80306-R02H**

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General Information

Gene Name Synonym:

DIAR5; EGP-2; EGP314; EGP40; ESA; HNPCC8; KS1/4; KSA; M4S1; MIC18; MK-1; TACSTD1; TROP-1; TROP1; CD326; EGP; EGP-2; Egp314; Ep-CAM; EpCAM1; GA733-2; gp40; Ly74; Tacsd1; Tacstd1; TROP1

Protein Construction:

A DNA sequence encoding the rat EPCAM (O55159) (Met1-Thr266) was expressed, fused with the Fc region of human IgG1 at the C-terminus.

Source: Rat

Expression Host: Human Cells

QC Testing

Purity: > 98 % as determined by SDS-PAGE

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: Gln 24

Molecular Mass:

The recombinant rat EPCAM/Fc is a disulfide-linked homodimer. The reduced monomer comprises 484 amino acids and has a predicted molecular mass of 54.8 kDa. The apparent molecular mass of the protein is approximately 61 and 37 kDa in SDS-PAGE under reducing conditions.

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:

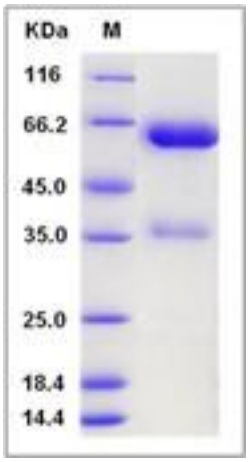
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Epithelial Cell Adhesion Molecule (EpCAM), also known as GA733-2 antigen, is a type â… transmembrane glycoprotein composed of an extracellular domain with two EGF-Like repeats and a cystenin-rich region, a transmembrane domain and a cytoplasmic domain. It modulates cell adhesion and proliferation. Its overexpression has been detected in many epithelial tumours and has been associated with high stage, high grade and a worse survival in some tumour types. EpCAM has been shown to function as a calcium-independent homophilic cell adhesion molecule that does not exhibit any obvious relationship to the four known cell adhesion molecule superfamilies. However, recent insights have revealed that EpCAM participates in not only cell adhesion, but also in proliferation, migration and differentiation of cells. In addition, recent study revealed that EpCAM is the Wnt-beta-catenin signaling target gene and may be used to facilitate prognosis. It has oncogenic potential and is activated by release of its intracellular domain, which can signal into the cell nucleus by engagement of elements of the wnt pathway.

References

1.Brunner A, *et al.* (2008) EpCAM is predominantly expressed in high grade and advanced stage urothelial carcinoma of the bladder. J Clin Pathol. 61(3):307-10.
2.Trzpis M, *et al.* (2008) EpCAM in morphogenesis. Front Biosci. 13: 5050-5.
3.Munz M, *et al.* (2009) The emerging role of EpCAM in cancer and stem cell signaling. Cancer Res. 69(14): 5627-9.