

Recombinant Human CA125/MUC16 (C-6His)

Catalog No. PKSH033847

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Synonyms	CA125 ovarian cancer antigen;CA125;CA-125;CA125MUC-16;FLJ14303;MUC16;mucin 16;cell surface associated;mucin-16
Species	Human
Expression Host	HEK293 Cells
Sequence	Gly12660-Met12923
Accession	Q8WXI7
Calculated Molecular Weight	29.2 kDa
Observed molecular weight	40-70 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 50 mM Tris-HCl, 100 mM Glycine, pH 7.5. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Background

MUC16, also known as the CA125 antigen, is a mucin protein that may be found in type I transmembrane or secreted forms that are used monitor the progress of epithelial ovarian cancer therapy. MUC16 is over-expressed by tumor cells including ovarian and mesothelial cancers. The transmembrane form can adhere to mesothelin in the peritoneum, facilitating metastasis of ovarian cancer to the peritoneal cavity. MUC16 also binds galectin-1 on immune cells and enhances its expression on tumor cells. MUC16-expressing tumors adhere to NK cells, down-regulate CD16 and suppress NK response, which may promote immune evasion. MUC16 is also cyclically expressed in the endometrium and may contribute to immune privilege during pregnancy. In the eye, MUC16 and other mucins protect the cornea and keep it hydrated. It is altered on the conjunctival epithelium of patients with non-Sjogren dry eye syndrome.

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