



## Human CD227(MUC1)

Cat No.: 03-01-1515

Product Name: Human CD227(MUC1)

Description: "Mucin 1(MUC1) is a member of the mucin family. Mucins are O-glycosylated proteins that play an essential role in forming protective mucous barriers on epithelial surfaces. These proteins also play a role in intracellular signaling. This protein is expressed on the apical surface of epithelial cells that line the mucosal surfaces of many different tissues including lung, breast stomach and pancreas. This protein is proteolytically cleaved into alpha and beta subunits that form a heterodimeric complex. The N-terminal alpha subunit functions in cell-adhesion and the C-terminal beta subunit is involved in cell signaling. Overexpression, aberrant intracellular localization, and changes in glycosylation of this protein have been associated with carcinomas. This gene is known to contain a highly polymorphic variable number tandem repeats (VNTR) domain. Alternate splicing results in multiple transcript variants. MUC1 is overexpressed in many cancers including colon, breast, ovarian, lung and pancreatic cancers. On cancer cells, MUC1 lost polarized expression and glycosylation property. MUC1 was initially identified from cancer cells as important cancer marker and



named as CA 27.29 (aka BR 27.29) and CA 15-3. CA 27.29 (aka BR 27.29) and CA 15-3 measure different epitopes of the same protein antigen product of the MUC1 gene seen in breast cancer. CA 27.29 has enhanced sensitivity and specificity compared to CA 15-3 and is elevated in 30% of patients with low-stage disease and 60 to 70% of patients with advanced-stage breast cancer. CA 27.29 levels over 100 U/mL and CA 15-3 levels over 25 U/mL are rare in benign conditions and suggest malignancy."

Type:	Protein
Property:	Recombinant Protein
Source:	HEK293
Genbank No.:	P15941 ( aa.24-1158)
Applications:	ELISA, WB, Immunogen
Formulation:	Each vial contains 50ug purified protein(1mg/ml) in PBS(pH7.4).
Purity:	>95%
Storage:	Store at -80°C, Avoid freeze / thaw cycle.
Limitation:	For research use only, not for use in diagnostic procedures.

