



Human MUC1 peptide (DAG-P0938)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	This gene encodes a membrane-bound protein that 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.[provided by RefSeq, Feb 2011]
Specificity	Expressed on the apical surface of epithelial cells, especially of airway passages, breast and uterus. Also expressed in activated and unactivated T-cells. Overexpressed in epithelial tumors, such as breast or ovarian cancer and also in non-epithelial tum
Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	Contains 1 SEA domain.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	MUC1 mucin 1, cell surface associated [Homo sapiens (human)]
Official Symbol	MUC1
Synonyms	MUC1; mucin 1, cell surface associated; EMA; MCD; PEM; PUM; KL-6; MAM6; MCKD; PEMT; CD227; H23AG; MCKD1; MUC-1; ADMCKD; ADMCKD1; CA 15-3; MUC-1/X; MUC1/ZD; MUC-1/SEC; mucin-1; episialin; DF3 antigen; H23 antigen; cancer antigen 15-3; krebs von den Lungen-6; mucin 1, transmembrane; carcinoma-associated mucin; polymorphic epithelial mucin; peanut-reactive urinary mucin; tumor associated epithelial mucin; breast carcinoma-associated antigen DF3; tumor-associated epithelial membrane antigen;
Entrez Gene ID	4582
mRNA Refseq	NM_001018016.2
Protein Refseq	NP_001018016.1
UniProt ID	P15941
Chromosome Location	1q21
Pathway	IL-7 Signaling Pathway, organism-specific biosystem; Metabolism of proteins, organism-specific biosystem; O-linked glycosylation of mucins, organism-specific biosystem; Post-translational protein modification, organism-specific biosystem; Termination of O-glycan biosynthesis, organism-specific biosystem;
Function	RNA polymerase II core promoter proximal region sequence-specific DNA binding; p53 binding; protein binding; transcription cofactor activity;