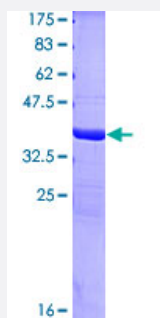


MUC1 (Human) Recombinant Protein (Q01)

Catalog # H00004582-Q01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human MUC1 partial ORF (NP_877418.1, 315 a.a. - 420 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	NSSLEDPSTDYYQELQRDISEMFLQYKQGGFLGLSNIKFRPGSVVVQLTLAFREGTINVHDMETQFNQYKTEAASRYNLTISDVSVSDVPFPFSAQSGAGVPGWG
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	37.4
Interspecies Antigen Sequence	Mouse (88%); Rat (80%)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — MUC1

Entrez GeneID [4582](#)

GeneBank Accession# [NM_182741.1](#)

Protein Accession# [NP_877418.1](#)

Gene Name MUC1

Gene Alias CD227, EMA, H23AG, MAM6, PEM, PEMT, PUM

Gene Description mucin 1, cell surface associated

Omim ID [158340](#)

Gene Ontology [Hyperlink](#)

Gene Summary This gene is a member of the mucin family and encodes a membrane bound, glycosylated phosphoprotein. The protein is anchored to the apical surface of many epithelia by a transmembrane domain, with the degree of glycosylation varying with cell type. It also includes a 20 aa variable number tandem repeat (VNTR) domain, with the number of repeats varying from 20 to 120 in different individuals. The protein serves a protective function by binding to pathogens and also functions in a cell signaling capacity. Overexpression, aberrant intracellular localization, and changes in glycosylation of this protein have been associated with carcinomas. Multiple alternatively spliced transcript variants that encode different isoforms of this gene have been reported, but the full-length nature of only some has been determined. [provided by RefSeq]

Other Designations DF3 antigen|H23 antigen|MUC-1/SEC|MUC-1/X|MUC1/ZD|OTTHUMP00000033787|OTTHUMP00000033790|OTTHUMP00000033795|breast carcinoma-associated antigen DF3|episialin|mucin 1|mucin 1, transmembrane|peanut-reactive urinary mucin|polymorphic epithelial mucin|tumor as

Publication Reference

- [Sandwich immunoassay coupled with isothermal exponential amplification reaction: An ultrasensitive approach for determination of tumor marker MUC1.](#)

Liu H, Zhang L, Xu Y, Chen J, Wang Y, Huang Q, Chen X, Liu Y, Dai Z, Zou X, Li Z.

Talanta 2019 Nov; 204:248.

Application: Func, Compound

- [Identification of tumor-reactive B cells and systemic IgG in breast cancer based on clonal frequency in the sentinel lymph node.](#)

McDaniel JR, Pero SC, Voss WN, Shukla GS, Sun Y, Schaetzle S, Lee CH, Horton AP, Harlow S, Gollihar J, Ellefson JW, Krag CC, Tanno Y, Sidiropoulos N, Georgiou G, Ippolito GC, Krag DN.

Cancer Immunology, Immunotherapy : CII 2018 May; 67(5):729.

Application: ELISA, Human, Blood plasma

- [Evaluation of known oncoantibodies, HER2, p53, and cyclin B1, in prediagnostic breast cancer sera.](#)

Lu H, Ladd J, Feng Z, Wu M, Goodell V, Pitteri SJ, Li CI, Prentice R, Hanash SM, Disis ML.

Cancer Prevention Research (Philadelphia, Pa.) 2012 Aug; 5(8):1036.

Application: ELISA, Human, Serum from patients with breast cancer

- [Identification of a New Panel of Serum Autoantibodies Associated with the Presence of In situ Carcinoma of the Breast in Younger Women.](#)

Desmetz C, Bascoul-Mollevi C, Rochaix P, Lamy PJ, Kramar A, Rouanet P, Maudelonde T, Mange A, Solassol J.

Clinical Cancer Research 2009 Jul; 15(14):4733.

Application: ELISA, Human, Human serum

Disease

- [Adenocarcinoma](#)
- [Asthma](#)
- [Attention Deficit Disorder with Hyperactivity](#)
- [Autistic Disorder](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bronchiolitis](#)
- [Carcinoma](#)

- [Chronic Disease](#)
- [Disease Susceptibility](#)
- [Gastritis](#)
- [Genetic Predisposition to Disease](#)
- [Helicobacter Infections](#)
- [Infant](#)
- [Kidney Failure](#)
- [Lung Diseases](#)
- [Lung Neoplasms](#)
- [Metaplasia](#)
- [NARP](#)
- [Neoplasms](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Respiratory Syncytial Virus Infections](#)
- [Sarcoidosis](#)
- [Stomach Neoplasms](#)