

Product Name: KD-Validated MUC1 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01534**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 122.1kDa

Antigen Information

Gene Name	MUC1
Alternative Names	MUC1; Mucin 1, Cell Surface Associated; KL-6; PEM; EMA; ADMCKD1; ADMCKD; Ca15-3; CD227; MCKD; MCD; PUM; Tumor-Associated Epithelial Membrane Antigen; Breast Carcinoma-Associated Antigen DF3; Peanut-Reactive Urinary Mucin; Polymorphic Epithelial Mucin; Carcinoma-Associated Mucin; Mucin 1, Transmembrane; Krebs Von Den Lungen-6; Cancer Antigen 15-3; Episialin; CA 15-3; Mucin-1; H23AG; MCKD1; MUC-1; PEMT; Medullary Cystic Kidney Disease 1 (Autosomal Dominant); Tumor Associated Epithelial Mucin; Epithelial Membrane Antigen; Tumor-Associated Mucin; CD227 Antigen; H23 Antigen; MUC-1/SEC; MUC-1/X; MUC1/ZD; ADTKD2; MAM6
Gene ID	4582.0
SwissProt ID	P15941

Immunogen

A synthesized peptide derived from human MUC1

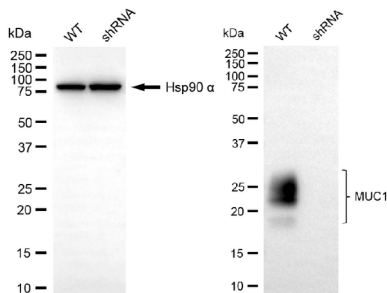
Background

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]

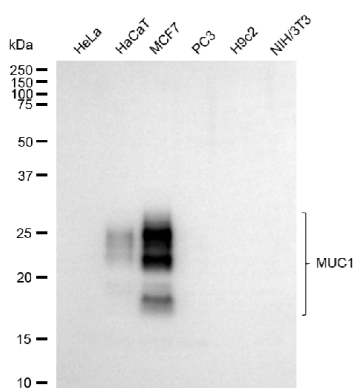
Research Area

Tags & Cell Markers, Signal Transduction, Cancer

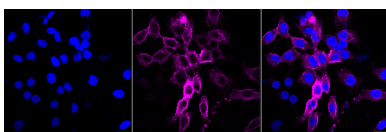
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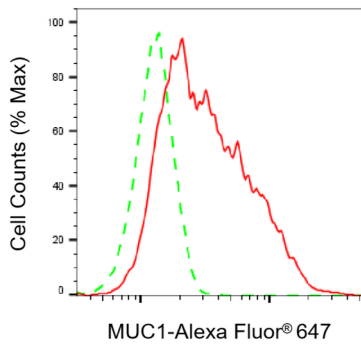
Western blotting analysis using MUC1 antibody (KVA01534). MUC1 expression in wild-type (WT) and MUC1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with MUC1 antibody (KVA01534, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using MUC1 antibody (KVA01534). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with MUC1 antibody (KVA01534, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HeLa cells with MUC1 antibody (KVA01534, 1:1,000). Nuclei were stained blue with DAPI; MUC1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser intensity and smart gain: Medium. Scale bar, 20 µm.



Flow cytometric analysis of MUC1 expression in HeLa cells using MUC1 antibody (KVA01534, 1:2,000). Green, isotype control; red, MUC1.