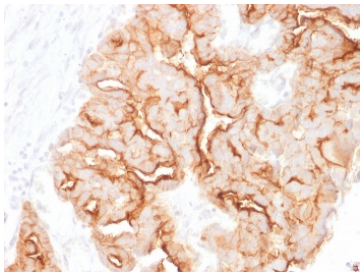
Mucin 16 Antibody / MUC16 / CA125 [clone MUC16/1860] (V8230)

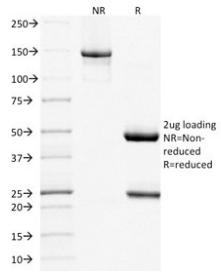
Catalog No.	Formulation	Size
V8230-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8230-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8230SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	MUC16/1860
Purity	Protein G affinity chromatography
UniProt	Q8WXI7
Localization	Cell surface, secreted
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This Mucin 16 antibody is available for research use only.



Immunohistochemistry analysis of Mucin 16 Antibody (Clone MUC16/1860) in FFPE human ovarian carcinoma tissue. Strong apical and membranous HRP-DAB brown staining is observed in malignant epithelial cells forming papillary and glandular structures, consistent with MUC16 / CA125 overexpression in ovarian carcinoma, while surrounding stromal elements are largely negative. Heat-induced epitope retrieval was performed in pH 9 Tris-EDTA buffer (10mM Tris, 1mM EDTA) for 20 minutes followed by cooling prior to staining.



SDS-PAGE analysis of purified, BSA-free Mucin 16 antibody as confirmation of integrity and purity.

Description

Mucin 16 Antibody recognizes Mucin 16 (MUC16), a high molecular weight transmembrane glycoprotein widely known as CA125. MUC16 is a membrane-associated mucin characterized by extensive O-linked glycosylation, multiple tandem repeat regions, and a large extracellular domain that can be shed into circulation. Mucin 16 Antibody is useful for detecting epithelial MUC16 expression in research applications involving normal and neoplastic tissues.

MUC16 antibody, also referred to as CA125 antibody and Ovarian cancer antigen 125 antibody in the literature, targets a mucin primarily expressed on the apical surface of epithelial cells in the female reproductive tract, including endometrium and fallopian tube, as well as in ocular and respiratory epithelium. In physiologic conditions, MUC16 contributes to epithelial barrier integrity, lubrication, and protection against pathogens. Its extracellular portion can be proteolytically released, forming the basis of the clinically utilized serum CA125 biomarker.

The MUC16 gene is located on human chromosome 19p13.2 and encodes one of the largest cell surface proteins identified. Structurally, MUC16 contains numerous SEA domains, extensive tandem repeats, a transmembrane region, and a short cytoplasmic tail involved in intracellular signaling. MUC16 has been shown to interact with mesothelin and other adhesion molecules, facilitating tumor cell attachment and metastatic dissemination, particularly in ovarian carcinoma.

Aberrant overexpression of MUC16 is strongly associated with epithelial ovarian carcinoma and is also reported in subsets of endometrial, pancreatic, breast, and lung carcinomas. In histologic sections, MUC16 typically demonstrates apical membranous and cytoplasmic staining in positive epithelial tumor cells. A MUC16 antibody is commonly used in research settings to evaluate epithelial differentiation, tumor origin, and mucin biology. Clone MUC16/1860 is a mouse monoclonal antibody developed to target MUC16 in experimental systems.

Application Notes

Optimal dilution of the Mucin 16 antibody should be determined by the researcher.

Immunogen

Full length native MUC16 protein purified from human ovarian carcinoma was used as the immunogen for this Mucin 16 antibody.

Storage

Store the Mucin 16 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

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