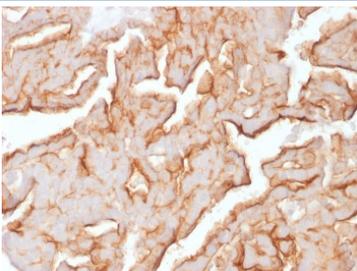


MUC16 Antibody Mouse Monoclonal [clone OCA125/1900] (V8373)

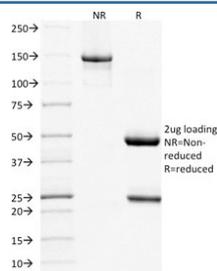
Catalog No.	Formulation	Size
V8373-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8373-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8373SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

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	OCA125/1900
Purity	Protein G affinity chromatography
UniProt	Q8WXI7
Localization	Cell surface, cytoplasmic, secreted
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
Limitations	This MUC16 antibody is available for research use only.



Immunohistochemistry analysis of MUC16 Antibody Mouse Monoclonal (Clone OCA125/1900) in FFPE human ovarian carcinoma tissue. Strong membranous and apical cytoplasmic HRP-DAB brown staining is observed in malignant epithelial cells forming glandular and papillary structures, consistent with MUC16 / CA125 overexpression in ovarian carcinoma, while adjacent stromal cells remain 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 MUC16 antibody (clone OCA125/1900) as confirmation of integrity and purity.

Description

MUC16 Antibody recognizes Mucin 16 (MUC16), a very high molecular weight transmembrane glycoprotein widely known as CA125. MUC16 is a member of the membrane-associated mucin family and is characterized by extensive O-linked glycosylation, multiple tandem repeat domains, and a large extracellular region that can be shed into circulation. The MUC16 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 settings, MUC16 contributes to epithelial barrier integrity, lubrication, and protection from pathogens and mechanical stress. Its extracellular domain can be cleaved and released, forming the basis of the clinically utilized CA125 serum biomarker.

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

Aberrant overexpression of MUC16 is most strongly associated with epithelial ovarian carcinoma and is also observed 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 study epithelial differentiation, tumor biology, and mucin-related mechanisms in cancer progression. Clone OCA125/1900 is a mouse monoclonal antibody developed to target MUC16 in experimental systems.

Application Notes

Optimal dilution of the MUC16 antibody should be determined by the researcher.

Immunogen

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

Storage

Store the MUC16 antibody at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).

