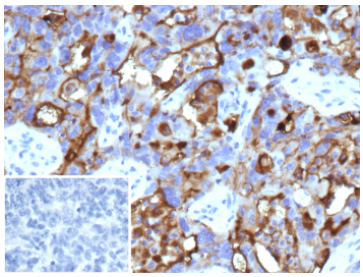
Ovarian cancer antigen 125 Antibody / MUC16 [clone CA125/13895R] (V6042)

Catalog No.	Formulation	Size
V6042-100UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6042-20UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug
V6042SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

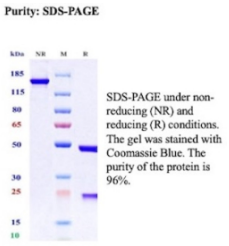
Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	CA125/13895R
Purity	Protein A affinity
UniProt	Q8WXI7
Localization	Cell membrane, Extracellular space, Secreted
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This Ovarian cancer antigen 125 antibody is available for research use only.



Immunohistochemistry analysis of Ovarian cancer antigen 125 Antibody (Clone CA125/13895R) in FFPE human ovarian carcinoma tissue. Prominent membranous and apical cytoplasmic HRP-DAB brown staining is observed in malignant epithelial cells, consistent with MUC16 / CA125 overexpression in ovarian carcinoma, while adjacent stromal elements are largely negative. Clone CA125/13895R demonstrates distinct cell surface localization. The inset shows PBS used in place of the primary antibody as a secondary-only negative control. Heat-induced epitope retrieval was performed in 10mM Tris with 1mM EDTA, pH 9.0, at 95oC for 45 minutes followed by cooling at room temperature for 20 minutes.



SDS-PAGE Analysis of Purified Ovarian cancer antigen 125 antibody (CA125/13895R). Confirmation of Purity and Integrity of Antibody.

Description

Ovarian cancer antigen 125 Antibody recognizes Mucin 16 (MUC16), a very high molecular weight transmembrane glycoprotein widely known as CA125 and cancer antigen 125. MUC16 is a membrane-associated mucin characterized by extensive O-linked glycosylation, multiple tandem repeat domains, and a large extracellular region that can be proteolytically shed into circulation. Ovarian cancer antigen 125 Antibody is designed for detection of MUC16 expression in epithelial and tumor tissues in research applications.

MUC16 antibody, also referred to as CA125 antibody and Mucin-16 antibody in the literature, targets a mucin primarily expressed on the apical surface of epithelial cells lining the female reproductive tract, including endometrium and fallopian tube, as well as in ocular and respiratory epithelium. Under physiologic conditions, MUC16 contributes to epithelial barrier protection, lubrication, and defense against environmental stress. Proteolytic release of its extracellular domain produces circulating CA125, which is widely used as a serum biomarker for monitoring ovarian carcinoma.

The MUC16 gene is located on human chromosome 19p13.2 and encodes one of the largest membrane-associated proteins identified. Structurally, MUC16 contains numerous SEA domains, extensive tandem repeat regions, a transmembrane segment, and a short cytoplasmic tail involved in intracellular signaling interactions. MUC16 has been shown to bind mesothelin and facilitate tumor cell adhesion and peritoneal dissemination in ovarian carcinoma models.

Aberrant overexpression of MUC16 is most strongly associated with epithelial ovarian carcinoma and is also reported in subsets of endometrial, pancreatic, breast, lung, and gastrointestinal carcinomas. In histologic sections, MUC16 typically demonstrates apical membranous and cytoplasmic staining in positive epithelial tumor cells. An ovarian cancer antigen 125 antibody is commonly applied in research settings to evaluate epithelial differentiation, tumor origin, and mucin biology. Clone CA125/13895R is a recombinant rabbit monoclonal antibody developed to target MUC16 in experimental systems.

Application Notes

1. Optimal dilution of the Ovarian cancer antigen 125 antibody should be determined by the researcher.

2. This Ovarian cancer antigen 125 antibody is recombinantly produced by expression in CHO cells.

Immunogen

Recombinant human MUC16 protein was used as the immunogen for the Ovarian cancer antigen 125 antibody.

Storage

Ovarian cancer antigen 125 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Copyright © NSJ Bioreagents. All rights reserved.