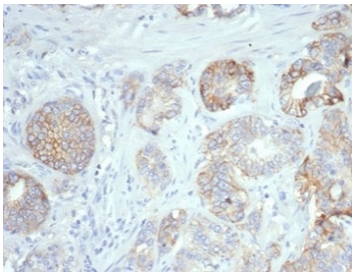
CD276 Antibody B7H3/4345 / B7-H3 Monoclonal Antibody [clone B7H3/4345] (V4040)

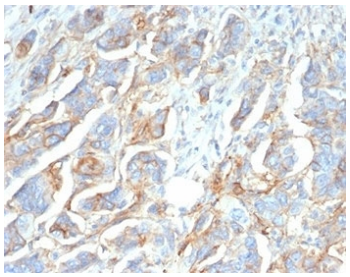
Catalog No.	Formulation	Size
V4040-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4040-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4040SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

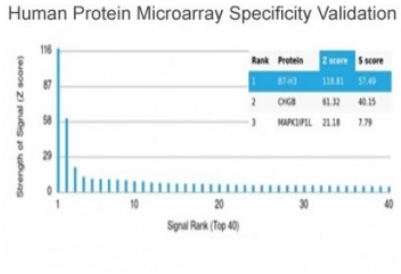
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	B7H3/4345
Purity	Protein A/G affinity
UniProt	Q5ZPR3
Localization	Cell surface, cytoplasm
Applications	Immunohistochemistry (FFPE): 1-2ug/ml Western blot: 2-4ug/ml
Limitations	This CD276 Antibody B7H3/4345 / B7-H3 Monoclonal Antibody is available for research use only.



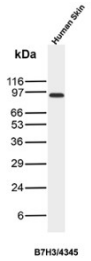
CD276 Antibody B7H3/4345 IHC Analysis of Human Ovarian Carcinoma Tissue. Immunohistochemical analysis of formalin-fixed, paraffin-embedded human ovarian carcinoma tissue using B7-H3 Monoclonal Antibody clone B7H3/4345. Prominent brown DAB staining is observed in malignant epithelial cells, with membranous and cytoplasmic immunoreactivity. Heat-induced epitope retrieval was performed in 10 mM Tris/1 mM EDTA buffer (pH 9.0) for 20 minutes.



CD276 Antibody B7H3/4345 IHC Analysis of Human Ovarian Carcinoma - Membranous Staining. Immunohistochemical analysis of formalin-fixed, paraffin-embedded human ovarian carcinoma tissue using B7-H3 Monoclonal Antibody clone B7H3/4345. Brown DAB staining highlights malignant epithelial structures, with prominent membranous and cytoplasmic immunoreactivity. Heat-induced epitope retrieval was performed in 10 mM Tris/1 mM EDTA buffer (pH 9.0) for 20 minutes.



CD276 Antibody B7H3/4345 HuProt Human Protein Microarray Specificity Analysis. Human protein microarray analysis using B7-H3 Monoclonal Antibody clone B7H3/4345 against more than 19,000 full-length human proteins. The ranked signal profile shows a prominent target-associated signal relative to the majority of proteins represented on the array, supporting preferential recognition of CD276 under the tested conditions. Z-scores indicate signal intensity relative to the array mean, while the S-score describes the separation between the highest-ranked signals.



CD276 Antibody B7H3/4345 WB Analysis of Human Skin Tissue. Western blot analysis of human skin tissue lysate using B7-H3 Monoclonal Antibody clone B7H3/4345. The assay demonstrates immunoreactivity in the tested tissue lysate. CD276 is a glycosylated transmembrane protein whose apparent molecular weight may differ from its calculated molecular weight.

Description

CD276 Antibody B7H3/4345 / B7-H3 Monoclonal Antibody recognizes CD276, also known as B7-H3, a type I transmembrane glycoprotein belonging to the B7 family of immunoregulatory proteins. CD276 contains extracellular immunoglobulin-like domains, a transmembrane region, and a short cytoplasmic tail. Alternative forms of the protein contain either two or four extracellular immunoglobulin-like domains. As a heavily glycosylated cell-surface molecule, B7-H3 participates in interactions between cells and their surrounding immune environment. Its biological functions have attracted considerable attention because of its involvement in immune regulation and cancer progression.

Members of the B7 family influence immune responses by interacting with receptors on lymphocytes and other immune cells. Early investigations suggested that CD276 could enhance T-cell proliferation and interferon-gamma production. Subsequent studies identified inhibitory effects on T-cell activation and cytokine secretion in other experimental settings. These apparently contrasting observations indicate that B7-H3 function is context-dependent. Although several potential interacting proteins have been proposed, the identity and physiological significance of its principal immune receptor remain incompletely established. Consequently, CD276 should not be regarded as an exclusively inhibitory immune checkpoint molecule.

CD276 expression has been documented in numerous malignancies, including prostate, breast, ovarian, lung, and colorectal cancers. Elevated expression has also been reported in tumor-associated stromal and vascular compartments. In several cancer types, increased B7-H3 expression correlates with aggressive clinicopathological features, tumor progression, or unfavorable prognosis. Beyond its potential effects on immune surveillance, CD276 has been implicated in cellular processes involving migration, invasion, metabolic adaptation, and resistance to cellular stress. The mechanisms underlying these associations vary among tumor models and remain subjects of ongoing investigation.

The distribution of B7-H3 within malignant tissues and the tumor microenvironment has made CD276 an important investigational target for cancer immunotherapy. Therapeutic strategies under development include monoclonal antibodies, antibody-drug conjugates, and engineered cellular therapies directed against B7-H3-expressing cells. CD276

Antibody B7H3/4345 supports investigation of this immunoregulatory glycoprotein and its expression in tumor biology, immune interactions, and the molecular characteristics of malignant tissues.

Explore our CD Antibodies for additional cell-surface markers involved in immune regulation, cellular communication, and tumor-associated signaling.

Application Notes

Optimal dilution of the CD276 Antibody B7H3/4345 / B7-H3 Monoclonal Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 100-300 from the human CD276 protein was used as the immunogen for the CD276 antibody.

Storage

Aliquot the CD276 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

B7-H3 antibody, CD276 protein antibody, B7 homolog 3 antibody, B7 homologue 3 antibody, B7RP-2 antibody, B7H3 antibody, B7-H3 immune checkpoint antibody

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