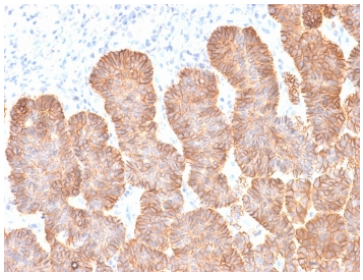
Recombinant EpCAM Antibody / Extracellular domain [clone rEGP40/1372] (V3570)

Catalog No.	Formulation	Size
V3570-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3570-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3570SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3570IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

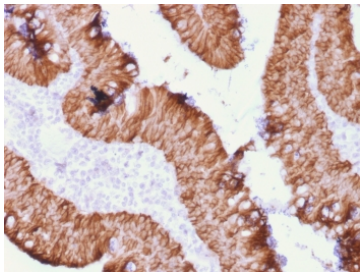
Recombinant MOUSE MONOCLONAL

Bulk quote request

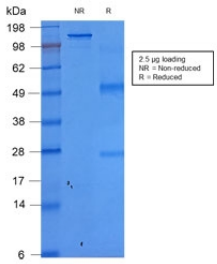
Availability	1-3 business days
Species Reactivity	Human, Dog, Cat
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rEGP40/1372
Purity	Protein G affinity chromatography
UniProt	P16422
Localization	Cell surface, cytoplasmic
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 0.5-1ug/ml for 30 min at RT
Limitations	This recombinant EpCAM antibody is available for research use only.



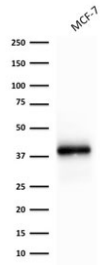
EpCAM Antibody Skin IHC. Immunohistochemistry testing of FFPE human skin with recombinant EpCAM antibody (clone rEGP40/1372). Required HIER: boil tissue sections in 10mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min.



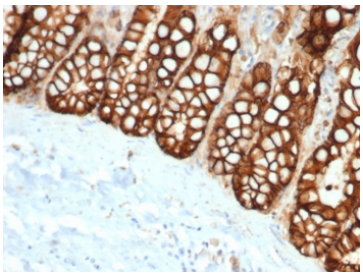
EpCAM Antibody Rectal Mass IHC. Immunohistochemistry testing of FFPE human rectal mass tissue with recombinant EpCAM antibody (clone rEGP40/1372). Required HIER: boil tissue sections in 10mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min.



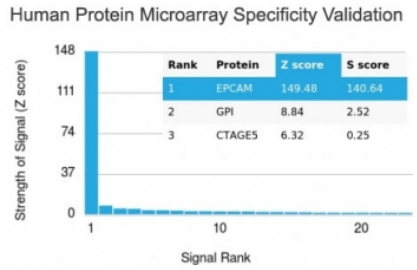
SDS-PAGE analysis of purified, BSA-free recombinant EpCAM antibody (clone rEGP40/1372) as confirmation of integrity and purity.



Western blot testing of human MCF-7 cell lysate with recombinant EpCAM antibody (clone rEGP40/1372). Expected molecular weight: ~35 kDa (unmodified), 40-43 kDa (glycosylated).



EpCAM Antibody FFPE Cat Small Intestine Tissue IHC. Immunohistochemistry staining of FFPE cat small intestine with recombinant EpCAM antibody (clone rEGP40/1372). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using recombinant EpCAM antibody (clone rEGP40/1372). These results demonstrate the foremost specificity of the rEGP40/1372 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.

Description

Recombinant EpCAM Antibody / Extracellular Domain recognizes Epithelial Cell Adhesion Molecule (EPCAM), a type I transmembrane glycoprotein that is prominently expressed on the surface of epithelial cells. EPCAM serves as both an adhesion molecule and a signaling regulator, contributing to the organization and maintenance of epithelial tissues throughout the body. Because the antibody targets an extracellular epitope, it can efficiently detect native EPCAM on the cell surface without requiring intracellular access. Recombinant antibody technology provides highly defined target

recognition and consistent performance, making extracellular domain-specific EpCAM antibodies valuable tools for epithelial cell analysis and characterization.

The extracellular region of EPCAM is responsible for mediating interactions between adjacent epithelial cells and facilitating the formation of organized epithelial structures. Through these activities, EPCAM contributes to maintenance of tissue integrity and coordinated cellular behavior. Detection of the extracellular domain allows researchers to visualize membrane-localized EPCAM expression and examine changes in epithelial organization during development, regeneration, and disease. As a result, extracellular domain antibodies are frequently used to investigate cell surface protein expression in intact tissues and cultured cells.

EPCAM is one of the most commonly utilized surface markers for identification of epithelial-derived tumor cells. Because the extracellular domain remains accessible on living cells, recombinant EpCAM antibodies are widely employed in flow cytometry, cell isolation, and characterization of epithelial cancer cell populations. Researchers frequently use extracellular domain-targeting antibodies to enrich epithelial cells from mixed samples, monitor tumor cell populations, and study mechanisms governing epithelial phenotype maintenance. These applications have made EPCAM an important target in translational cancer research and cellular phenotyping studies.

In addition to its role in tumor biology, EPCAM is expressed in numerous normal epithelial tissues where it participates in tissue development, cellular differentiation, and regenerative processes. Surface expression of EPCAM is often associated with epithelial progenitor populations and actively remodeling epithelial compartments. Consequently, recombinant extracellular domain antibodies are valuable for studies involving organoid systems, epithelial stem cells, developmental biology, and tissue repair mechanisms. The ability to recognize native cell surface EPCAM further enhances their utility in functional and live-cell applications.

At NSJ Bioreagents, we provide highly validated recombinant antibodies for cell biology, cancer research, developmental biology, and stem cell applications. Recombinant EpCAM Antibody / Extracellular Domain is useful for detecting cell surface EPCAM expression, identifying epithelial cell populations, isolating epithelial-derived cells, and investigating epithelial tissue organization. Ongoing research into EPCAM continues to expand our understanding of epithelial biology, cellular differentiation, and the molecular mechanisms that regulate tissue architecture and disease progression.

Explore our EpCAM Antibody / Epithelial Cell Marker Antibody page for additional validation data and applications involving epithelial cell identification, tissue organization, and epithelial-derived tumor research.

Application Notes

Optimal dilution of the recombinant EpCAM antibody should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

A portion of amino acids 100-224 (extracellular domain) was used as the immunogen for the recombinant EpCAM antibody.

Storage

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

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