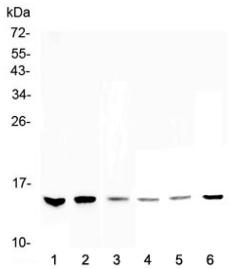
HE4 Antibody / WFDC2 (RQ4465)

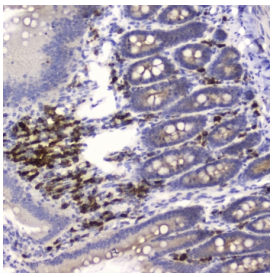
Catalog No.	Formulation	Size
RQ4465	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

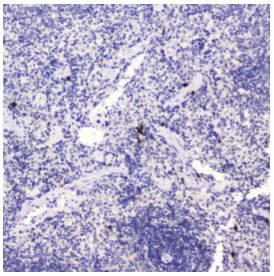
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	Q14508
Localization	Secreted, cytoplasmic
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml Direct ELISA : 0.1-0.5ug/ml (human recombinant protein)
Limitations	This HE4 antibody is available for research use only.



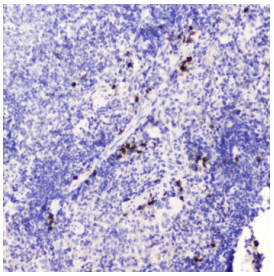
HE4 Antibody Human, Mouse and Rat WB. Western blot analysis was performed using HE4 Antibody at 0.5 ug/mL. Lane 1: human HeLa cell lysate; lane 2: human MDA-MB-231 cell lysate; lane 3: human MDA-MB-451 cell lysate; lane 4: rat thymus lysate; lane 5: mouse testis lysate; lane 6: mouse thymus lysate. The predicted molecular weight of HE4 is approximately 13-25 kDa depending on the degree of glycosylation. A specific immunoreactive band is detected in human, rat, and mouse samples at the expected molecular weight range, demonstrating that this Human Epididymis Protein 4 Antibody recognizes HE4 across multiple species and is suitable for Western blot analysis.



HE4 Antibody Rat Small Intestine IHC. Immunohistochemistry was performed on FFPE rat small intestine tissue using HE4 Antibody at 0.5 ug/mL. Heat-induced epitope retrieval was carried out in pH 6 citrate buffer for 10-20 minutes, followed by cooling to room temperature before incubation with the primary antibody. Bound antibody was visualized using an HRP-conjugated secondary antibody and DAB chromogen. Distinct cytoplasmic staining is observed in cells within the intestinal tissue, consistent with HE4 expression, while surrounding tissue shows minimal background staining. These results demonstrate that this Human Epididymis Protein 4 Antibody is suitable for detecting HE4 in formalin-fixed, paraffin-embedded rat tissue by immunohistochemistry.



HE4 Antibody Rat Spleen IHC. Immunohistochemistry was performed on FFPE rat spleen tissue using HE4 Antibody at 0.5 ug/mL. Heat-induced epitope retrieval was carried out in pH 6 citrate buffer for 10-20 minutes, followed by cooling to room temperature before incubation with the primary antibody. Bound antibody was visualized using an HRP-conjugated secondary antibody and DAB chromogen. Distinct staining is observed in a limited population of splenic cells, while the majority of surrounding tissue remains negative, demonstrating selective HE4 expression with low background. These results support the use of this Human Epididymis Protein 4 Antibody for immunohistochemical detection of HE4 in formalin-fixed, paraffin-embedded rat tissues.



HE4 Antibody Mouse Spleen IHC. Immunohistochemistry was performed on FFPE mouse spleen tissue using HE4 Antibody at 0.5 ug/mL. Heat-induced epitope retrieval was carried out in pH 6 citrate buffer for 10-20 minutes, followed by cooling to room temperature before incubation with the primary antibody. Bound antibody was visualized using an HRP-conjugated secondary antibody and DAB chromogen. Distinct staining is observed in scattered splenic cells, while most surrounding lymphoid tissue remains negative, indicating selective HE4 expression with minimal background. These findings demonstrate that this Human Epididymis Protein 4 Antibody is suitable for immunohistochemical detection of HE4 in formalin-fixed, paraffin-embedded mouse tissue.

Description

HE4 Antibody recognizes Human Epididymis Protein 4, also known as WFDC2, a secreted glycoprotein belonging to the whey acidic protein domain family. Encoded by the WFDC2 gene, HE4 contains characteristic whey acidic protein four-disulfide core domains that are thought to contribute to protease regulation and extracellular tissue homeostasis. Although originally identified in the epididymis, subsequent studies have demonstrated expression in a variety of normal epithelial tissues, particularly within the respiratory, reproductive, and renal systems. As a secreted protein, HE4 has become an important target for studies investigating epithelial biology, protein secretion, tissue remodeling, and disease-associated changes in gene expression. NSJ Bioreagents provides this HE4 Antibody to support reliable detection of Human Epididymis Protein 4 across multiple research applications.

Human Epididymis Protein 4 is synthesized as a secreted glycoprotein and undergoes normal processing through the endoplasmic reticulum and Golgi apparatus before release into the extracellular environment. Members of the whey acidic protein domain family have been implicated in regulating protease activity, innate defense mechanisms, epithelial barrier function, and tissue repair, although the complete physiological role of HE4 continues to be investigated. Because expression levels vary considerably between tissues and biological conditions, researchers frequently use HE4 Antibody in Western blotting, immunohistochemistry, and other immunodetection techniques to examine protein localization and relative abundance in experimental models.

HE4 has attracted considerable scientific interest because altered expression has been reported in numerous pathological conditions, particularly those involving epithelial tissues. Consequently, Human Epididymis Protein 4 has become a widely studied biomarker in translational research investigating tumor biology, tissue remodeling, fibrosis, and

inflammatory responses. Beyond oncology, HE4 is also being examined for potential roles in renal disease, pulmonary disorders, and other conditions characterized by changes in epithelial cell function. These diverse research areas continue to expand interest in HE4 Antibody as a dependable reagent for evaluating protein expression in both basic and applied biomedical research.

Whether investigating epithelial biology, secreted glycoproteins, disease-associated protein expression, or the biological function of WFDC2, HE4 Antibody provides researchers with a valuable tool for detecting Human Epididymis Protein 4 in human, mouse, and rat samples. Combined with validated performance in multiple immunoassays, this antibody supports reproducible analysis of HE4 expression across a broad range of experimental applications.

Explore our Cancer Antibodies page to discover additional antibodies for studying tumor biology, cancer biomarkers, and disease-associated protein expression.

Application Notes

Optimal dilution of the HE4 antibody should be determined by the researcher.

Immunogen

Human recombinant protein (amino acids E31-F124) was used as the immunogen for the HE4 antibody.

Storage

After reconstitution, the HE4 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

Human Epididymis Protein 4 antibody, WFDC2 antibody, WAP Four-Disulfide Core Domain Protein 2 antibody, HE4 Protein antibody, Epididymal Secretory Protein E4 antibody, WAP5 antibody

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