

Rabbit HE4/WFDC2 Polyclonal Antibody | anti-HE4 antibody

Anti-HE4/WFDC2 Antibody

CATALOG # AAA124943	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

HE4/WFDC2; Polyclonal Antibody; Anti-HE4/WFDC2 Antibody; WAP four-disulfide core domain protein 2; Epididymal secretory protein E4; Major epididymis-specific protein E4; Putative protease inhibitor WAP5; WFDC2; HE4; WAP5; WAP four-disulfide core domain 2; anti-HE4 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	No cross reactivity with other proteins.
Purity/Purification	Immunogen Affinity Purified
Form/Format	Lyophilized
Sequence Length	73
Applicable Applications for anti-HE4 antibody	ELISA (Direct ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived human HE4 recombinant protein (Position: E31-F124).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Relevant Detection Systems	It is recommended to use an Enhanced Chemiluminescent Kit with anti-Rabbit IgG for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit for IHC-P.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



IHC (Immunohiostchemistry)
Figure 3. IHC analysis of HE4 using anti-HE4 antibody.HE4 was detected in paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/mL rabbit anti-HE4 antibody.HE4 was detected in paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/mL rabbit anti-HE4 antibody.HE4 was detected in paraffin-embedded section of rat spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-HE4 Antibody overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)
Figure 1. Western blot analysis of HE4 using anti-HE4 antibody.Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: human Hela whole cell lysates,Lane 2: human MDA-MB-231 whole cell lysates,Lane 3: human MDA-MB-453 whole cell lysates,Lane 4: rat thymus tissue lysates,Lane 5: mouse testis tissue lysates,Lane 6: mouse thymus tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-HE4 antigen affinity purified polyclonal antibody at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for HE4 at approximately 15KD. The expected band size for HE4 is at 13KD.

ADDITIONAL INFORMATION

Related Product Information for anti-HE4 antibody	Description: Rabbit IgG polyclonal antibody for HE4 detection. Tested with WB, IHC-P, Direct ELISA in Human; Mouse; Rat. Background: WAP four-disulfide core domain protein 2, also known as Human Epididymis Protein 4 (HE4), is a protein that in humans is encoded by the WFDC2 gene. This gene encodes a protein that is a member of the WFDC domain family. The WFDC domain, or WAP Signature motif, contains eight cysteines forming four disulfide bonds at the core of the protein, and functions as a protease inhibitor in many family members. This gene is expressed in pulmonary epithelial cells, and was also found to be expressed in some ovarian cancers. The encoded protein is a small secretory protein, which may be involved in sperm maturation.
References	1. "Entrez Gene: WFDC2 WAP four-disulfide core domain 2". 2. Hellström I, Raycraft J, Hayden-Ledbetter M, Ledbetter JA, Schummer M, McIntosh M, Drescher C, Urban N, Hellström KE (2003-07-01). "The HE4 (WFDC2) Protein Is a Biomarker for Ovarian Carcinoma". Cancer Research63 (13): 3695-3700. 3. Molina R, Escudero JM, Augé JM, Filella X, Foj L, Torné A, Lejarcegui J, Pahisa J (2011). "HE4 a novel tumour marker for ovarian cancer: Comparison with CA 125 and ROMA algorithm in patients with gynaecological diseases". Tumor Biology 32 (6): 1087-95.

NCBI AND UNIPROT INFORMATION

NCBI GI #	56699495
NCBI GeneID	10406
NCBI Accession #	NP_006094.3
NCBI GenBank Nucleotide #	NM_006103.4
UniProt Accession #	Q14508; Q6IB27; Q8WXV9; Q8WXW0; Q8WXW1; Q8WXW2; Q96KJ1; A2A2A5; A2A2A6; A6PVD5
Molecular Weight	8,120 Da
NCBI Official Full Name	WAP four-disulfide core domain protein 2
NCBI Official Synonym Full Names	WAP four-disulfide core domain 2
NCBI Official Symbol	WFDC2
NCBI Official Synonym Symbols	HE4; WAP5; EDDM4; dJ461P17.6
NCBI Protein Information	WAP four-disulfide core domain protein 2
UniProt Protein Name	WAP four-disulfide core domain protein 2
UniProt Gene Name	WFDC2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/he4-wfdc2-antibody-direct-elisa-immunohistochemistry-western-blot-elisa/124943>