

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human HE4/WFDC2 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 676013
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human HE4/WFDC2 Thr28-Phe124 Accession # Q14508
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Immunohistochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

HE4 (also WFDC2; WAP Four-disulfide core domain protein 2) is a secreted, 25 kDa glycoprotein member of the Whey Acidic Protein family of molecules. It is expressed by a wide variety of epithelial cells, including respiratory epithelium, salivary gland mucous cells, breast duct epithelium, distal tubule renal epithelium, and epididymal epithelium. It is believed to play a role in innate defense, and/or function as a protease inhibitor (perhaps for neutrophil elastase). Ovarian epithelial tumors have an increased expression of HE4, leading to the suggestion that HE4 could represent a tumor marker for ovarian cancer. Mature human HE4 is 94 amino acids (aa) in length. It contains two WAP domains that likely mediate antiprotease and/or antimicrobial activity (aa 31-73 and 74-123). There are four potential splice variants. One shows a deletion of aa 27-74, while three others show aa substitutions: 28 aa for aa 75-124, 23 aa for aa 1-74, and 10 aa for aa 71-124. Over aa 31-124, human HE4 shares 63% aa identity with an extended (144 amino acid) mouse form of mature HE4.

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