

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human HE4/WFDC2 in direct ELISAs.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human HE4/WFDC2 Thr28-Phe124 Accession # Q14508
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human HE4/WFDC2, see our available Western blot detection antibodies

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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). Although ovarian cuboidal epithelium does not express HE4, ovarian epithelial tumors do, 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.