



Recombinant Protein Technical Manual
Recombinant Human WFDC2/HE4 Protein (His Tag)
RPES2751

Product Data:

Product SKU: RPES2751

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: Q14508

Protein Information:

Molecular Mass: 11.1 kDa

AP Molecular Mass: 22 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: WAP Four-Disulfide Core Domain Protein 2; Epididymal Secretory Protein E4; Major Epididymis-Specific Protein E4; Putative Protease Inhibitor WAP5; WFDC2; HE4; WAP5

Immunogen Information:

Sequence: Glu31-Phe124

Background:

WAP Four-Disulfide Core Domain Protein 2 (WFDC2) is a 25 kDa secreted glycoprotein containing two WAP domains. Mature human WFDC2 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. WFDC2 is a member of a family of stable 4-disulfide core proteins that are secreted at high levels. 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. WFDC2 may be a component of the innate immune defences of the lung, nasal and oral cavities and suggest that WFDC2 functions in concert with related WAP domain containing proteins in epithelial host defence. WFDC2 re-expression in lung carcinomas may prove to be associated with tumour type and should be studied in further detail. Mammary gland expression of tammor WFDC2 during the course of lactation showed WFDC2 was elevated during pregnancy, reduced in early lactation and absent in mid-late lactation. WFDC2 can undergo a complex series of alternative splicing events that can potentially yield five distinct WAP domain containing protein isoforms.