

## Recombinant Human WFDC2 (C-6His)

Catalog No: C550

<b>Description</b>	Recombinant Human WAP Four-Disulfide Core Domain Protein 2 is produced by our Mammalian expression system and the target gene encoding Glu31-Phe124 is expressed with a 6His tag at the C-terminus.
<b>Source</b>	Human Cells
<b>Alternative name</b>	WAP Four-Disulfide Core Domain Protein 2; Epididymal Secretory Protein E4; Major Epididymis-Specific Protein E4; Putative Protease Inhibitor WAP5; WFDC2; HE4; WAP5
<b>Accession No.</b>	Q14508
<b>Predicted Molecular Weight</b>	11.07kDa
<b>AP Molecular Weight</b>	18-22kDa, reducing conditions.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.
<b>Reconstitution</b>	<p>Always centrifuge tubes before opening. Do not mix by vortex or pipetting.</p> <p>It is not recommended to reconstitute to a concentration less than 100µg/ml.</p> <p>Dissolve the lyophilized protein in distilled water.</p> <p>Please aliquot the reconstituted solution to minimize freeze-thaw cycles.</p>
<b>Quality Control</b>	<p>Purity: Greater than 95% as determined by reducing SDS-PAGE.</p> <p>Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.</p>
<b>Shipping</b>	<p>The product is shipped at ambient temperature.</p> <p>Upon receipt, store it immediately at the temperature listed below.</p>
<b>Storage</b>	<p>Lyophilized protein should be stored at &lt; -20°C, though stable at room temperature for 3 weeks.</p> <p>Reconstituted protein solution can be stored at 4-7°C for 2-7 days.</p> <p>Aliquots of reconstituted samples are stable at &lt; -20°C for 3 months.</p>
<b>Background</b>	<p>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 tammar 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.</p>

### SDS-Page

