

## PrimeGene Technical Data Sheet

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<b>Catalog Number:</b>	604-04
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	Approximately 10.0 kDa, a single polypeptide chain containing 94 amino acids. But it migrates with an apparent molecular mass of 16.9 kDa in SDS-PAGE.
<b>Quantity:</b>	2µg/10µg/1000µg
<b>AA Sequence:</b>	EKTGVCPQLQ ADQNCTQECV SDSECADNLK CCSAGCATFC SLPNDKEGSC PQVNINFPQL GLCRDQCQVD SQCPGQMKCC RINGCGKVSCV TPNF
<b>Purity:</b>	> 95 % by SDS-PAGE.
<b>Application:</b>	WB, ELISA.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.0.
<b>Endotoxin:</b>	Less than 1.0 EU/µg of rHE4 as determined by LAL method.
<b>Reconstitution:</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
<b>Shipping:</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>
<b>Usage:</b>	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>

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### ***Human Epididymis Protein 4***

HE4 (also WFDC2; WAP Four-disulfide core domain protein 2), epididymal secretory protein E4, major epididymis-specific protein E4, putative protease inhibitor WAP5, is a secreted, 25 kDa glycoprotein member of the Whey Acidic Protein family. 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. WFDC2 is also highly expressed in a number of tumors cells lines, such ovarian, colon, breast, lung and renal cells lines. 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.