

## ChemWhat Technical Data Sheet (TDS)

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<b>Catalog Number:</b>	461-01
<b>Source:</b>	<i>Pichia Pastoris</i>
<b>Molecular Weight:</b>	Approximately 43.0 kDa, a single glycosylated polypeptide chain containing 235 amino acids.
<b>Quantity:</b>	100IU/250IU/1000IU
<b>Unit Definition:</b>	One unit is defined as the amount of enzyme needed to cleave 50 µg of fusion protein in 16 hours to 95 % completion at 25 °C in a buffer containing 25 mM Tris-HCl, pH 7.6, 50 mM NaCl, and 2 mM CaCl <sub>2</sub> .
<b>Physical Appearance:</b>	Sterile liquid.
<b>Formulation:</b>	50 mM Tris-HCl, pH 8.0, 0.5 M NaCl and 50 % glycerol.
<b>Endotoxin:</b>	Less than 1EU/µg of rBoEKL as determined by LAL method.
<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>● 6 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 3 months, -20 to -70 °C under sterile conditions after opening.</li></ul>
<b>Usage:</b>	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>

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### ***Bovine Enterokinase***

Enterokinase (EK) is an amino protease existing in duodenum of mammal and is involved in digestion. It consists of a disulfide-linked 82–140 k Da heavy chain which anchors enterokinase in the intestinal brush border membrane and a 35–62 k Da light chain which contains the catalytic subunit. Additionally, both of the chains are derived from a single precursor that is cleaved by a trypsin-like protease. EK can specially recognize the amino acid sequence DDDDK, and digest the peptide bond after the lysine residue.

rEK was report to be more effective than nature EK in cleaving recombinant proteins. Furthermore, the light chain possesses the whole enzyme activity of EK.

rBoEK has the highest activity than EK of other species and is used wildly in biochemical applications.