

# Recombinant Human Tumor Necrosis Factor-alpha/TNFSF2 GMP (rHuTNF- $\alpha$ /TNFSF2 GMP) PrimeGene Technical Data Sheet

<b>Catalog Number:</b>	GMP-103-01
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	Approximately 17.5 kDa, a single non-glycosylated polypeptide chain containing 158 amino acids.
<b>Quantity:</b>	5 $\mu$ g/100 $\mu$ g/1mg
<b>AA Sequence:</b>	MVRSSSRTPS DKPVAHVVAN PQAEGQLQWL NRRANALLAN GVELRDNQLV VPSEGLYLIY SQVLFKGGQC PSTHVLLTHT ISRIAVSYQT KVNLLSAIKS PCQRETPEGA EAKPWYEPIY LGGVFQLEKG DRLSAEINRP DYLDFAESGQ VYFGIHAL
<b>Purity:</b>	> 98 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The ED <sub>50</sub> as determined by a cytotoxicity assay using murine L929 cells is less than 0.05 ng/ml, corresponding to a specific activity of > 2.0 $\times$ 10 <sup>7</sup> IU/mg in the presence of actinomycin D, which is calibrated against rHuTNF- $\alpha$ /TNFSF2 reference standard (NIBSC code: 12/154).
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 $\mu$ m filtered concentrated solution in 10 mM PB, 10 mM NaCl, pH 7.0.
<b>Endotoxin:</b>	Less than 0.01 EU/ $\mu$ g of rHuTNF- $\alpha$ /TNFSF2 GMP as determined by LAL method.
<b>Sterility:</b>	Negative.
<b>Mycoplasma:</b>	Negative when tested by RD-RCA.
<b>Host Cell Protein:</b>	Less than 0.05% when tested by ELISA.
<b>Host Cell DNA:</b>	Less than 20ng/mg when tested by qPCR.
<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 $\leq$ -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>● A minimum of 12 months when stored at <math>\leq</math> -20 °C as supplied. Refer to lot specific COA for the Use by Date.</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 GMP product can be for research use or further manufacturing use.
<b>Quality statement:</b>	<b>The manufacture and testing of this product is in compliance with ICH Q7a guidelines.</b>

