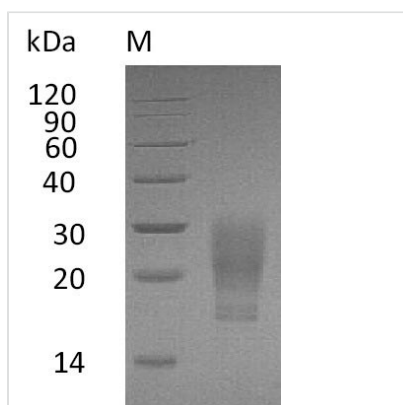




# Recombinant Human Granulocyte-macrophage colony-stimulating factor (CSF2) (Active)

<b>Product Code</b>	CSB-AP003601HU
<b>Abbreviation</b>	Recombinant Human CSF2 protein (Active)
<b>Uniprot No.</b>	P04141
<b>Form</b>	Lyophilized powder
<b>Storage Buffer</b>	Lyophilized from a 0.2 $\mu$ m filtered 20 mM PB, 150 mM NaCl, pH 7.4
<b>Product Type</b>	Colony Stimulating Factor
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Biological Activity</b>	The ED50 as determined in a cell proliferation assay using TF $\beta$ 1 human erythroleukemic cells is 6-30 pg/ml.
<b>Purity</b>	$\geq$ 95% as determined by SDS-PAGE.
<b>Sequence</b>	APARSPSPSTQPWEHVNAIQEARLLNLSRDTAEMNETVEVISEMFDLQEP CLQTRLELYKQGLRGSLTKLKGPLTMMASHYKQHCPPTPETSCATQIITFESFK ENLKDFLLVIPFDCWEPVQE
<b>Research Area</b>	Immunology
<b>Source</b>	Mammalian cell
<b>Target Names</b>	CSF2
<b>Expression Region</b>	18-144aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	C-terminal 6xHis-tagged
<b>Mol. Weight</b>	15.5 kDa
<b>Protein Length</b>	Full Length of Mature Protein

## Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

## Endotoxin

Less than 1.0 EU/ $\mu$ g as determined by LAL method.



---

**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

---

**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.