



Recombinant Bovine Granulocyte-macrophage colony-stimulating factor (CSF2)

Product Code	CSB-EP006045BO-B
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P11052
Product Type	Recombinant Protein
Immunogen Species	Bos taurus (Bovine)
Purity	>85% (SDS-PAGE)
Sequence	APT RPPNTATRPW QHVDAIKEAL SLLNHSSDTD AVMNDTEVVS EKFDSQEPTC LQTRLKLYKN GLQGSLSLM GSLTMMATHY EKHCPTPET SCGTQFISFK NFKEDLKEFL FIIPDCWEP AQK
Source	E.coli
Target Names	CSF2
Protein Names	Recommended name: Granulocyte-macrophage colony-stimulating factor Short name= GM-CSF Alternative name(s): Colony-stimulating factor Short name= CSF
Expression Region	18-143
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	This protein is a cytokine that controls the production, differentiation, and function of granulocytes and macrophages. The active form of the protein is found extracellularly as a homodimer. This gene has been localized to a cluster of related genes at chromosome region 5q31, which is known to be associated with interstitial deletions in the 5q- syndrome and acute myelogenous leukemia. Other genes in the cluster include those encoding interleukins 4, 5, and 13.
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.