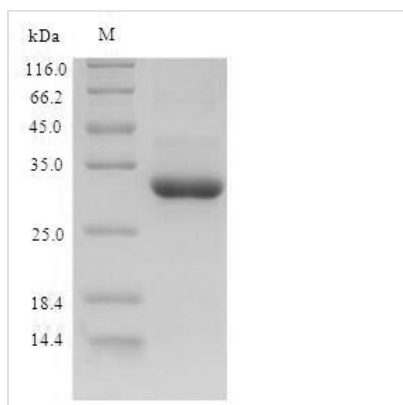




Recombinant Dog Granulocyte colony-stimulating factor (CSF3)

Product Code	CSB-EP006049DO
Relevance	Granulocyte/macrophage colony-stimulating factors are cytokines that act in hematopoiesis by controlling the production, differentiation, and function of 2 related white cell populations of the blood, the granulocytes and the monocytes-macrophages. This CSF induces granulocytes.
Abbreviation	Recombinant Dog CSF3 protein
Storage	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.
Uniprot No.	P35834
Alias	Short name: G-CSF
Product Type	Recombinant Protein
Immunogen Species	Canis lupus familiaris (Dog) (Canis familiaris)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MAPLGPTGPLPQSFLKCLEQMRKVQADGTALQETLCATHQLCHPEELVLLG HALGIPQPPLSSCSSQALQLMGCLRQLHSGFLFLYQGLLQALAGISPELAPTLDT LQLDTTDFAINIWQQMEDLGMAPAVPPTQGTMPAFTSAFQRRAGGVLVASNL QSFLELAYRALRHFAKP
Research Area	Stem Cells
Source	E.coli
Target Names	CSF3
Expression Region	1-175aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	34.9kDa
Protein Length	Full Length
Image	



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

Description

The recombinant Dog CSF3 was expressed with the amino acid range of 1-175. The calculated molecular weight for this CSF3 protein is 34.9 kDa. The CSF3 protein was expressed in e.coli. The CSF3 gene fragment has been modified by fusing the N-terminal 6xHis-SUMO tag, providing convenience in detecting and purifying the recombinant CSF3 protein during the following stages.

The dog granulocyte colony-stimulating factor (CSF3) is a cytokine that plays a crucial role in regulating the production and function of neutrophils, a type of white blood cell involved in the immune response. CSF3 stimulates the proliferation, differentiation, and maturation of neutrophil precursor cells in the bone marrow, enhancing the release of mature neutrophils into the bloodstream. This cytokine is essential for maintaining an effective immune response against bacterial and fungal infections. Research on dog CSF3 contributes to understanding immune system dynamics in canines, providing insights into hematopoiesis, immune function, and potential applications in veterinary medicine for managing conditions associated with neutropenia.

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.