

Granulocyte Macrophage-Colony Stimulating Factor Active Protein | GM active protein

Recombinant Human Granulocyte Macrophage-Colony Stimulating Factor

CATALOG #
AAA38115

PRODUCT SYNONYMS

Granulocyte Macrophage-Colony Stimulating Factor; Recombinant Human Granulocyte Macrophage-Colony Stimulating Factor; Coagulation factor IX; EC 3.4.21.22; Christmas factor; Plasma thromboplastin component; PTC; F9; FIX; HEMB; MGC129641; MGC129642; GLA domain; Factor IX.; GM active protein

PRODUCT SPECIFICATIONS

Purity/Purification	Greater than 95.0% as determined by SDS-PAGE.
Form/Format	The Factor-IX was lyophilized from a sterile solution containing 20mM Tris-HCl pH-7.4, 0.1M NaCl and 1mM Benzamidine.
Sequence	Thesequenc eofthefirs tfiveN-ter minalamino acidswasde terminedan dwasfoundt obeAla-Pro -Ala-Arg-S er.N-termi nalmethion inehasbeen completely removedenz ymatically
Sequence Length	144
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Source	Human Plasma.
Solubility	It is recommended to reconstitute the lyophilized 100U Factor-IX in sterile 100µl of 18M?-cm H2O, which can then be further diluted to other aqueous solutions.
Biological Activity	The activity per mg was tested and found to be 306.5 PEU/mg.
Human Virus Test	Human plasma was tested and found negative for HIV-1, HIV-2, Hepatitis B Surface antigen and HCV. Donors are screened for CJD (Creutzfeldt-Jakob Disease).
Preparation and Storage	Lyophilized Factor-IX although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Factor-IX should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for GM active protein	Description: Human Factor-IX produced from fresh frozen human plasma is a glycosylated polypeptide chain having a molecular mass of 56 kDa. . Introduction: Human Factor IX also called Christmas-Factor is a glycoprotein, which is synthesized in the liver and belongs to the serine proteases system and is part of the S1 peptidase family. Lack of Factor-IX causes Hemophilia-B meaning Christmas Disease. Factor-IX has a N-terminus region which contains 12xGla residues which assist the calcium dependant binding of Factor-IX to the phospholipid surface. Factor-IX is activated by either factor XIa or the factor VIIa/tissue factor/phospholipid complex. Cleavage yields the intermediate IXa, which is subsequently converted to the fully active form IXab. Factor-IX binds initially to exosites on the factor XIa heavy chain, followed by interaction at the active site with subsequent bond cleavage. Coagulation factor IX is activated by interaction with the erythrocyte membrane, causing intrinsic coagulation. Chaperones & lectins act simultaneously to guarantee the proper folding of Factor-IX and the retention of mutant molecules. Human Factor IX, activated by either the Contact or Tissue Factor Pathway, is responsible for the activation of Factor X to Xa.
Product Categories/Family for GM active protein	Cytokines and Growth Factors ; Growth Factors ; Colony Stimulating Factor

NCBI AND UNIPROT INFORMATION

NCBI GI #	27437030
NCBI GeneID	1437
NCBI Accession #	NP_000749.2
NCBI GenBank Nucleotide #	NM_000758.3
UniProt Accession #	P04141; Q14CE8; Q2VPI8; Q8NFI6
Molecular Weight	16,295 Da
NCBI Official Full Name	granulocyte-macrophage colony-stimulating factor
NCBI Official Synonym Full Names	colony stimulating factor 2 (granulocyte-macrophage)
NCBI Official Symbol	CSF2
NCBI Official Synonym Symbols	GMCSF
NCBI Protein Information	granulocyte-macrophage colony-stimulating factor; CSF; granulocyte macrophage-colony stimulating factor; molgramostin; sargramostim
UniProt Protein Name	Granulocyte-macrophage colony-stimulating factor
UniProt Gene Name	CSF2
UniProt Synonym Gene Names	GMCSF; GM-CSF; CSF
UniProt Entry Name	CSF2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://www.aaabiotech.com/gm-active-protein/granulocyte-macrophage-colony-stimulating-factor/38115>