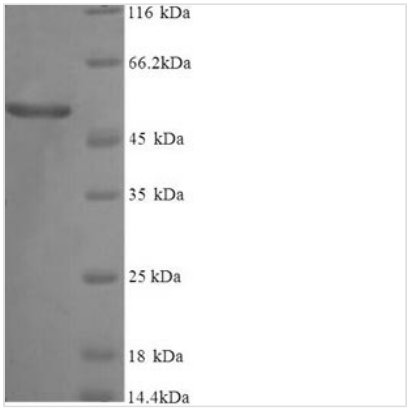
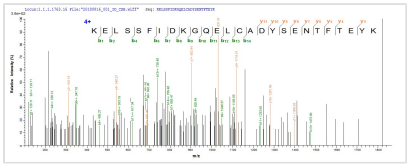
Recombinant Human Vitamin D-binding protein (GC), partial

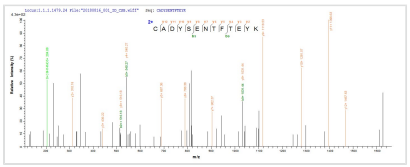
Product Code	CSB-YP009306HU
Relevance	Involved in vitamin D transport and storage, scavenging of extracellular G-actin, enhancement of the chemotactic activity of C5 alpha for neutrophils in inflammation and macrophage activation.
Abbreviation	Recombinant Human GC protein, partial
Storage	The shelf life 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.	P02774
Alias	Gc protein-derived macrophage activating factor
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	RGRDYEKNKVCKEFSHLGKEDFTSLSLVLYSRKFPSGTFEQVSQLVKEVVSLT EACCAEGADPDCYDTRTSALSAKSCESNSPFPVHPGTAECCTKEGLERKLCM AALKHQPQEFPTYVEPTNDEICEAFRKDPKEYANQFMWEYSTNYGQAPLSLL VSYTKSYLSMVGSCCTSASPTVCFLKERLQLKHLSLLTTLSNRVCSQYAAYGE KKSRLSNLIKLAQKVPTADLEDVLPLAEDITNILSKCCESASEDCMAKELPEHTV KLCDNLSTKNSKFEDCCQEKTAMDVFVCTYFMPAAQLPELPDVELPTNKDVC DPGNTKVMDKYTFELSRRTHLPEVFLSKVLEPTLKSLGECCDVEDSTTCFNAK GPLLKKELSSFIDKGQELCADYSENTFTEYKKKLAERLKAKLPDATPTELAKLV NKHSDFASNCCSINSPPLYCDSEIDAELKNIL
Research Area	Signal Transduction
Source	Yeast
Target Names	GC
Protein Names	Recommended name: Vitamin D-binding protein Short name= DBP Short name= VDB Alternative name(s): Gc-globulin Group-specific component
Expression Region	19-474aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMOSTAR-tagged
Mol. Weight	67.0kDa
Protein Length	Partial
Image	



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



Based on the SEQUEST from database of Yeast host and target protein, the LC-MS/MS Analysis result of CSB-YP009306HU could indicate that this peptide derived from Yeast-expressed Homo sapiens (Human) GC.



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Description

The process of expressing the recombinant human GC protein in the yeast requires the recombinant DNA gene formed by the integration of encoding gene for the 19-474aa of the human GC protein and N-terminal 6xHis-SUMOSTAR tag sequence, the expression vector that the recombinant DNA gene inserts into, the yeast that provided the necessary macromolecules and components for transcription and translation of the cloned expression vector. After isolation and purification, this N-terminal 6xHis-SUMOSTAR-tagged recombinant GC protein was obtained. This recombinant GC protein is characterized by high purity (>90%, SDS-PAGE). This GC protein ran along the gel to the band of approximately 52 kDa molecular weight.

GC is a gene providing instruction of making a protein named Vitamin D-binding protein (also abbreviated as VDB or DBP) in human and belongs to ALB/AFP/VDB family. DBP is a multifunctional protein that is well-conserved in the evolution of vertebrates. This protein plays a crtical role in vitamin D metabolites. In addtion to transporting vitamin D metabolites, DBP is proposed to be involved in the transport of fatty acids, in complement C5a-mediated chemotaxis, and in the activation of macrophages.

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

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