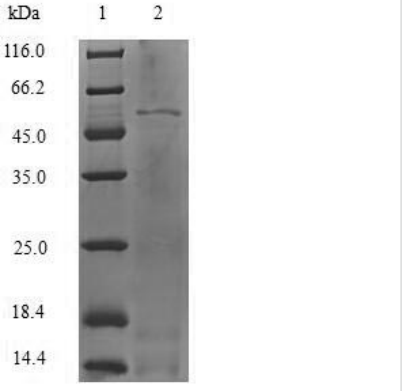
Recombinant Human Vitamin D-binding protein (GC), partial

Product Code	CSB-EP009306HU
Relevance	Growth factor active in angiogenesis, lymphangiogenesis and endothelial cell growth, stimulating their proliferation and migration and also has effects on the permeability of blood vessels. May function in the formation of the venous and lymphatic vascular systs during bryogenesis, and also in the maintenance of differentiated lymphatic endothelium in adults. Binds and activates VEGFR-2 (KDR/FLK1) and VEGFR-3 (FLT4) receptors.
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
Storage Buffer	Tris-based buffer,50% glycerol
Product Type	Recombinant Proteins
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	RGRDYEKNKVCKEFSHLGKEDFTSLSLVLYSRKFPSGTFEQVSQLVKEVVSLT EACCAEGADPDCYDTRTSALSAKSCESNSPFPVHPGTAECCTKEGLERKLCM AALKHQPQEFPTYVEPTNDEICEAFRKDPKEYANQFMWEYSTNYGQAPLSLL VSYTKSYLSMVGSCCTSASPTVCFLKERLQLKHLSLLTTLSNRVCSQYAAYGE KKSRLSNLIKLAQKVPTADLEDVLPLAEDITNILSKCCESASEDCMAKELPEHTV KLCDNLSTKNSKFEDCCQEKTAMDVFVCTYFMPAAQLPELPDVELPTNKDVC DPGNTKVMDKYTFELSRRTHLPEVFLSKVLEPTLKSLGECCDVEDSTTCFNAK GPLLKKELSSFIDKGQELCADYSENTFTEYKKKLAERLKAKLPDATPTELAKLV NKHSDFASNCCSINSPPLYCDSEIDAELKNIL
Lead Time	3-7 business days
Research Area	Cancer
Source	E.coli
Gene Names	GC
Protein Names	Recommended name: Vitamin D-binding protein Short name= DBP Short name= VDBAlternative 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-tagged
Mol. Weight	55.0kDa

Protein Description	Partial

Image



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

Description

The gene responsible for the Human Vitamin D-binding protein (19-474aa) is incorporated into a plasmid vector, forming recombinant plasmid. The resulting recombinant plasmid is introduced into e.coli cells, from which cells survive in the presence of a specific antibiotic are selected. The selected e.coli cells containing the recombinant plasmid are cultured under conditions that facilitate the expression of the gene of interest. A N-terminal 6xHis tag is linked to the protein. After expression, affinity purification is used to isolate and purify the recombinant Human Vitamin D-binding protein from the cell lysate. Denaturing SDS-PAGE is employed to resolve the resulting recombinant Human Vitamin D-binding protein, revealing a purity greater than 90%.