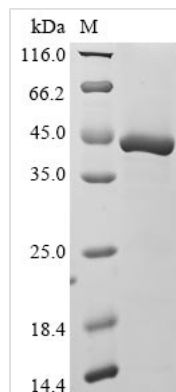




Recombinant Human Hemoglobin subunit delta (HBD)

Product Code	CSB-EP010152HU
Abbreviation	Recombinant Human HBD 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.	P02042
Form	Liquid or Lyophilized powder
Storage Buffer	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	VHLTPEEKTA VNALWGKVNVD AVGGEALGRLLVVYPWTQRFFESFGDLSSPD AVMGNPVKVKAHGKKVLGAFSDGLAHL DNLKGTFSQLSELHCDKLHVDPENFR LLGNVLVCVLARNFGKEFTPQMQAAYQKVVAGVANALAHKYH
Research Area	Transport
Source	E.coli
Target Names	HBD
Expression Region	2-147aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-GST-tagged
Mol. Weight	47.5 kDa
Protein Length	Full Length of Mature Protein
Image	



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

Description

Amino acids 2-147 constitute the expression domain of recombinant Human HBD. The calculated molecular weight for this HBD protein is 47.5 kDa. This HBD recombinant protein is manufactured in e.coli. The HBD gene fragment has been modified by fusing the N-terminal 6xHis-GST tag, providing convenience in detecting and purifying the recombinant HBD protein during the following stages.

The human hemoglobin subunit delta (HBD) is a protein that is part of the hemoglobin molecule, responsible for oxygen transport in red blood cells. HBD is located on chromosome 11. Hemoglobin is composed of four subunits – two alpha globin chains and two beta globin chains. The HBD expression is primarily restricted to the embryonic and fetal stages of development. In adults, the delta globin chain is replaced by the beta-globin chain. Hemoglobin containing the delta subunit is known as fetal hemoglobin (HbF). Understanding the regulation of hemoglobin subunit expression is crucial for comprehending normal hemoglobin function and disorders like thalassemias and sickle cell disease.

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.