



Recombinant Rat Hemoglobin subunit alpha-1/2 (Hba1)

Product Code	CSB-EP010147RA
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P01946
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	>85% (SDS-PAGE)
Sequence	VLSADDKTN IKNCWVGKIGG HGGEYGEEAL QRMFAAFPTT KTYFSHIDVS PGSAQVKAHG KKVADALAKA ADHVEDLPGA LSTLSDLHAH KLRVDPVNFK FLSHCLLVTL ACHHPGDFTP AMHASLDKFL ASVSTVLTSK YR
Source	E.coli
Target Names	Hba1
Protein Names	Recommended name: Hemoglobin subunit alpha-1/2 Alternative name(s): Alpha-1/2-globin Hemoglobin alpha-1/2 chain
Expression Region	2-142
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	The human alpha globin gene cluster located on chromosome 16 spans about 30 kb and includes seven loci: 5 - zeta - pseudozeta - mu - pseudoalpha-1 - alpha-2 - alpha-1 - theta - 3 . The alpha-2 (HBA2) and alpha-1 (HBA1) coding sequences are identical. These genes differ slightly over the 5 untranslated regions and the introns, but they differ significantly over the 3 untranslated regions. Two alpha chains plus two beta chains constitute HbA, which in normal adult life comprises about 97% of the total hemoglobin; alpha chains combine with delta chains to constitute HbA-2, which with HbF (fetal hemoglobin) makes up the remaining 3% of adult hemoglobin. Alpha thalassemias result from deletions of each of the alpha genes as well as deletions of both HBA2 and HBA1; some nondeletion alpha thalassemias have also been reported.
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.