



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

<b>Product Code</b>	CSB-MP010147RA
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P01946
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	VLSADDKTN IKNCWVGKIGG HGGEYGEEAL QRMFAAFPTT KTYFSHIDVS PGSAQVKAHG KKVADALAKA ADHVEDLPGA LSTLSDLHAH KLRVDPVNFK FLSHCLLVTL ACHHPGDFTP AMHASLDKFL ASVSTVLTSK YR
<b>Source</b>	Mammalian cell
<b>Target Names</b>	Hba1
<b>Protein Names</b>	Recommended name: Hemoglobin subunit alpha-1/2 Alternative name(s): Alpha-1/2-globin Hemoglobin alpha-1/2 chain
<b>Expression Region</b>	2-142
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	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.
<b>Reconstitution</b>	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.
<b>Shelf Life</b>	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.