

Recombinant Human HBA2

Cat. No. HBA2-29306TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length Human Hemoglobin subunit alpha expressed in <i>Saccharomyces cerevisiae</i> ; amino acids 1-142 , MWt 15.2kDa. Protein is tagged with 26 kDa proprietary tag.
Species	Human
ProteinLength	1-142 a.a.
Description	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.
Form	Liquid
Purity	>90% by SDS-PAGE
Storage buffer	Preservative: None Constituents: 30% Glycerol, 0.5% Triton-X-100, 50mM HEPES,

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	30mM Glutathione, 100mM Sodium chloride, 1mM DTT, pH 7.5
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Sequences of amino acids	MVLSPADKTNVKAAWGKVGAHAGEYGAEALERMFLSFPTT KTYFPHFDLSHGSAQ VKGHGKKVADALTNAVAHVDDMP NALSALSDLHAHKL RVPVNFKLLSHCLLVTLA AHLPA EFTPAVHASLDKFLASVSTVLTSKYR
Full Length	Full L.
GENE INFORMATION	
Gene Name	HBA2 hemoglobin, alpha 2 [Homo sapiens]
Official Symbol	HBA2
Synonyms	HBA2; hemoglobin, alpha 2; hemoglobin subunit alpha;
Gene ID	3040
mRNA Refseq	NM_000517
Protein Refseq	NP_000508
MIM	141850
Uniprot ID	P69905
Chromosome Location	16p13.3
Pathway	African trypanosomiasis, organism-specific biosystem; African trypanosomiasis,

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conserved biosystem; Malaria, organism-specific biosystem; Malaria, conserved biosystem; Selenium Pathway, organism-specific biosystem;

Function

contributes_to haptoglobin binding; heme binding; metal ion binding; oxygen binding; oxygen transporter activity;

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