



RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Recombinant Human Alpha Hemoglobin Stabilizing Protein

Catalog No.
228-10034

Source
E.Coli

Synonyms

Alpha-hemoglobin-stabilizing protein, Erythroid-associated factor, Erythroid differentiation-related factor, AHSP, EDRF, ERAF.

Introduction

Alpha-hemoglobin stabilizing protein (AHSP) is an erythroid-specific protein that acts as a chaperone to prevent the aggregation of α -hemoglobin during normal erythroid cell development. AHSP specifically protects free α -hemoglobin from precipitation in live cells and in solution. AHSP is expected to modulate pathological states of alpha-hemoglobin excess such as beta-thalassemia. Furthermore, AHSP promotes alpha globin chain stability in human erythropoiesis. In addition, the AHSP stabilizes the alpha-Hb chain, thus avoiding its precipitation and its ability to generate ROS, which is implicated in cell death. AHSP is expressed in blood and bone marrow. AHSP subunit is a monomer, it forms a heterodimer with free alpha-hemoglobin. On the other hand, AHSP does not bind beta-hemoglobin nor alpha2beta2 hemoglobin A. AHSP is downregulated in TSEs (transmissible spongiform encephalopathies).

Description

AHSP Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 102 amino acids (1-102 a.a.) and having a molecular mass of 11.8kDa. The AHSP is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered colorless solution.

Formulation

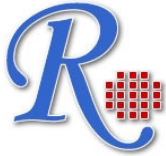
The AHSP protein solution contains 20mM Tris-HCl buffer (pH8.0) and 10% glycerol.

Stability

AHSP although stable 4°C for 4 weeks, should be stored desiccated below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



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Amino Acid Sequence

MALLKANKDL ISAGLKEFSV LLNQQVFNDP LVSEEDMVTV VEDWMNFYIN
YYRQQVTGEP QERDKALQEL RQELNTLANP FLAKYRDFLK SHELP SHPPP SS.

Purity

Greater than 95.0% as determined by SDS-PAGE.

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