Hemoglobin

Catalog number

H1850-01A

Supplier

United States Biological

Hemoglobin, an iron-containing metalloprotein present in red blood cells and involved in oxygen transport. Hemoglobin is a tetramer consisting of two alpha chains and two beta chains, with each chain containing a heme group. Each heme group contains an iron atom which is responsible for the binding of oxygen. Mutations in the genes for the hemoglobin protein result in a group of hereditary diseases in humans termed hemoglobinopathies, and include sickle-cell disease and thalassemias.

Hemoglobin is found in the erythrocytes of all vertebrates. There is a wide diversity of amino acid sequences and substitutions within mammalian hemoglobins, however the molecular weight is generally around 66kD with an iron content of about 0.34%. The level of hemoglobin in the blood is used in the diagnosis of anemia; levels in the feces are indicative of various clinical conditions.

Applications

Suitable for use in ELISA and Western Blot. Other applications not tested.

Recommended Dilutions

Western Blot: 1:100-1:1000
Optimal dilutions to be determined by the researcher.

Storage and Stability

May be stored at 4°C for short-term only. Aliquot to avoid repeated freezing and thawing. Store at -20°C. Aliquots are stable for 12 months. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.

Immunogen

Hemoglobin purified from human erythrocytes

Formulation

Supplied as a liquid in PBS, pH 7.4, 0.09% sodium azide.

Purity

Purified by Protein G affinity chromatography.

Specificity

Recognizes human hemoglobin. Shows <10% cross-reactivity with bovine hemoglobin.

Product Type

Pab

Source

human

Isotype

IgG

Grade

Affinity Purified

Applications

E WB

Crossreactivity

Hu

Storage

-20°C