SANTA CRUZ BIOTECHNOLOGY, INC.

Hemoglobin (5B6): sc-69909

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Hemoglobin (Hgb) is a 66.7 kDa protein coupled to four iron-binding, methene-linked tetrapyrrole rings (heme). The α (16p13.3; 5'-ζ-pseudoζ-pseudoα2-pseudoα1-α2-α1-θ1-3') and β (11p15.5) globin loci determine the basic hemoglobin structure. The globin portion of hemoglobin consists of two α chains and two β chains arranged in pairs forming a tetramer. Each of the four globin chains covalently associates with a heme group. The bonds between α and β chains are weaker than between similar globin chains, thereby forming a cleavage plane that is important for oxygen binding and release. High affinity for oxygen occurs upon relaxation of the α1-β2 cleavage plane. When the two α1-β2 interfaces are closely bound, hemoglobin has a low affinity for oxygen. Hb A, which contains two α chains plus two β chains, comprises 97% of total circulating hemoglobin. The remaining 3% of total circulating hemoglobin is comprised of Hb A-2, which consists of two α chains plus two δ chains, and fetal hemoglobin (Hb F), which consists of two α chains together with two γ chains.

REFERENCES

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SOURCE

Hemoglobin (5B6) is a rat monoclonal antibody raised against Hemoglobin of mouse origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Hemoglobin (5B6) is recommended for detection of Hemoglobin of mouse origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.