



Hemoglobin μ (C-12): sc-160430

BACKGROUND

Hemoglobin (Hgb) is coupled to four iron-binding, methene-linked tetrapyrrole rings (heme). The α and β 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 α 1- β 2 cleavage plane. When the two α 1- β 2 interfaces are closely bound, Hemoglobin has a low affinity for oxygen. Hemoglobin 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 Hemoglobin 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. Hemoglobin μ is a 141 amino acid Hemoglobin chain expressed in erythroid tissues with its highest expression during erythroblast terminal differentiation.

REFERENCES

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STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: HBM (human) mapping to 16p13.3.

SOURCE

Hemoglobin μ (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Hemoglobin μ of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-160430 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Hemoglobin μ (C-12) is recommended for detection of Hemoglobin μ of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other Hemoglobin family members.

Suitable for use as control antibody for Hemoglobin μ siRNA (h): sc-93246, Hemoglobin μ shRNA Plasmid (h): sc-93246-SH and Hemoglobin μ shRNA (h) Lentiviral Particles: sc-93246-V.

Molecular Weight of Hemoglobin μ : 16 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.