Hemoglobin β (37-8): sc-21757

BACKGROUND
Hemoglobin (Hgb) is coupled to four iron-binding, methene-linked tetrapyrole rings (heme). The α(16p13.3; 5'-pseudoζ-pseudoδ2-pseudoα1-α2; α1-51-3) and β(11p15.4) globin loci determine the basic Hemoglobin structure. The globin portion of Hgb 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.

CHROMOSOMAL LOCATION
Genetic locus: HBB (human) mapping to 11p15.4.

SOURCE
Hemoglobin β (37-8) is a mouse monoclonal antibody raised against human hemoglobin.

PRODUCT
Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Hemoglobin β (37-8) is available conjugated to agarose (sc-21757 AC), 500 µg/0.25 mg agarose in 1 ml, for IP; to HRP (sc-21757 HRP), 200 µg/ml, for WB, IHC and ELISA; to either phycoerythrin (sc-21757 PE), fluorescein (sc-21757 FITC), Alexa Fluor® 488 (sc-21757 AF488), Alexa Fluor® 546 (sc-21757 AF546), Alexa Fluor® 594 (sc-21757 AF594) or Alexa Fluor® 647 (sc-21757 AF647), 200 µg/ml, for WB (RGB), IF, IHC and FCM; and to either Alexa Fluor® 680 (sc-21757 AF680) or Alexa Fluor® 790 (sc-21757 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, Hemoglobin β (37-8) is available conjugated to either PerCP (sc-21757 PerCP) or PerCP-Cy5.5 (sc-21757 PCPC5), 100 tests in 2 ml, for IF, IHC(P) and FCM.

APPLICATIONS
Hemoglobin β (37-8) is recommended for detection of Hemoglobin β of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells).

Suitable for use as control antibody for Hemoglobin β siRNA (h): sc-35558, Hemoglobin β shRNA Plasmid (h): sc-35558-SH and Hemoglobin β shRNA (h) Lentiviral Particles: sc-35558-V.

Molecular Weight of Hemoglobin β: 16 kDa.

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

DATA

SELECT PRODUCT CITATIONS


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

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