

Product datasheet for TA396794S

OriGene Technologies, Inc.

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HBB Mouse Monoclonal Antibody [Clone ID: 15C2.C11.F2.G11]

Product data:

Clonality:

Product Type: Primary Antibodies

Clone Name: 15C2.C11.F2.G11

Applications: ELISA, WB

Recommended Dilution: WB: 1ug/mL

ELISA: 1:20,000

Monoclonal

Reactivity: Human
Host: Mouse

Isotype: IgG1, kappa

Immunogen: Anti-Hemoglobin beta C Monoclonal Antibody was produced in mice by repeated

immunizations with synthetic peptide corresponding to amino acid residues near the N-

terminus of Hb β-subunit conjugated to KLH.

Specificity: This protein A purified mouse monoclonal antibody reacts specifically with human HbC beta

c-variant isoform. Anti-HbC is purified from tissue culture supernatant by protein A

purification. Blast analysis shows 100% homology to Human, Pan troglodytes, Pan paniscus, Gorilla gorilla, and Hylobates Iar. This antibody does not react with the HbA, HbS, HbF,

or HbA-2 isoforms.

Formulation: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Concentration: 1.0 mg/mL - lot specific

Conjugation: Unconjugated

Storage: Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of

reagent (25 μ L). To minimize loss of volume dilute 1:10 by adding 225 μ L of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing

and thawing.

Stability: Expiration date is one (1) year from date of receipt.

Database Link: P68871





Background:

HbC antibodies detect the E6K mutant in the hemoglobin beta subunit. Functional hemoglobin (Hb) is a hetero tetramer composed of 2 alpha and 2 beta subunits ($\alpha 2\beta 2$). Common isoform variants of hemoglobin include HbA, HbS, HbC, HbF, and HbA2. Sickle cell disease (SCD), thalassemias and hemoglobinopathies occur when aberrant forms of hemoglobin are expressed in children and adults. Globin gene mutations affect the structure and expression levels of Hb. Sickle cell disease and the more benign sickle cell trait are observed in more than 100 million people globally. Less significant than the SCD-E6V, HbC E6K mutation causes a mild hemolytic anemia. HbC antibody does not react to other forms of Hb. This antibody is ideal for investigators involved in Cardiovascular and developmental biology research.

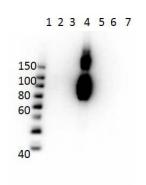
Synonyms:

mouse anti-HbC antibody, mouse anti-hemoglobin antibody, Hemoglobin beta subunit C variant, HbBc, HbC, HbC Antibody, LVV-hemorphin-7, Spinorphin, Beta-globin, Hemoglobin beta chain, Sickle Cell Disease (SCD)

Note:

Anti-Hemoglobin beta C (MOUSE) antibody has been tested by ELISA and Western Blotting. This antibody is designed for use in lateral flow. Specific conditions of reactivity should be optimized by the end user. Expect a band of approximately 16 kDa.

Product images:



Western Blot of Mouse Anti-Hemoglobin beta C Antibody. Lane 1: Molecular Weight Ladder. Lane 2: HbA peptide conjugated to BSA. Lane 3: HbA-2 peptide conjugated to BSA. Lane 4: HbC peptide conjugated to BSA. Lane 5: HbF peptide conjugated to BSA. Lane 6: HbS peptide conjugated to BSA. Lane 7: BSA alone. Load: 50ng per lane. Primary antibody: Anti-HbC antibody at 1µg/mL overnight at 4°C. Secondary antibody: Rabbit Anti-Mouse secondary antibody at 1:40,000 for 30 min at RT. Block: MB-073 for 30 min RT. Predicted/Observed: Reactivity seen in Lane 4 specific to HbC only.