

# Product datasheet

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# ARG55677 anti-Hemoglobin beta antibody

Package: 100 μl Store at: -20°C

### **Summary**

Product Description Rabbit Polyclonal antibody recognizes Hemoglobin beta

Tested Reactivity Hu

Predict Reactivity Ms, Rat, Bov, Chk, Pig, Rb

Tested Application FACS, IHC-P, WB

Host Rabbit

**Clonality** Polyclonal

Isotype IgG

Target Name Hemoglobin beta

Species Human

Immunogen KLH-conjugated synthetic peptide corresponding to aa. 80-107 (C-terminus) of Human Hemoglobin

beta.

Conjugation Un-conjugated

Alternate Names CD113t-C; beta-globin; Beta-globin; Hemoglobin beta chain; Hemoglobin subunit beta

# **Application Instructions**

| Application table | Application  | Dilution    |
|-------------------|--|-------------|
|                   | FACS   | 1:10 - 1:50 |
|                   | IHC-P  | 1:10 - 1:50 |
|                   | WB   | 1:1000      |
| Application Note  | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. |             |
| Positive Control  | Human heart  |             |

#### **Properties**

Form Liquid

Purification Purification with Protein A and immunogen peptide.

Buffer PBS and 0.09% (W/V) Sodium azide.

Preservative 0.09% (W/V) Sodium azide.

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

#### Bioinformation

Database links <u>GeneID: 3043 Human</u>

Swiss-port # P68871 Human

Gene Symbol HBB

Gene Full Name hemoglobin, beta

Background The alpha (HBA) and beta (HBB) loci determine the structure of the 2 types of polypeptide chains in

adult hemoglobin, Hb A. The normal adult hemoglobin tetramer consists of two alpha chains and two beta chains. Mutant beta globin causes sickle cell anemia. Absence of beta chain causes beta-zero-thalassemia. Reduced amounts of detectable beta globin causes beta-plus-thalassemia. The order of the genes in the beta-globin cluster is 5'-epsilon -- gamma-G -- gamma-A -- delta -- beta--3'. [provided

by RefSeq, Jul 2008]

**Function** Involved in oxygen transport from the lung to the various peripheral tissues.

LVV-hemorphin-7 potentiates the activity of bradykinin, causing a decrease in blood pressure.

Spinorphin: functions as an endogenous inhibitor of enkephalin-degrading enzymes such as DPP3, and as a selective antagonist of the P2RX3 receptor which is involved in pain signaling, these properties

implicate it as a regulator of pain and inflammation. [UniProt]

Calculated Mw 16 kDa

PTM Glucose reacts non-enzymatically with the N-terminus of the beta chain to form a stable ketoamine

linkage. This takes place slowly and continuously throughout the 120-day life span of the red blood cell.

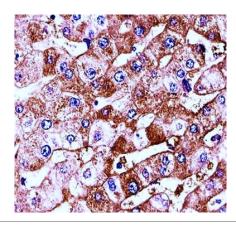
The rate of glycation is increased in patients with diabetes mellitus.

S-nitrosylated; a nitric oxide group is first bound to Fe(2+) and then transferred to Cys-94 to allow

capture of O(2).

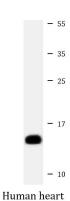
Acetylated on Lys-60, Lys-83 and Lys-145 upon aspirin exposure.

# **Images**



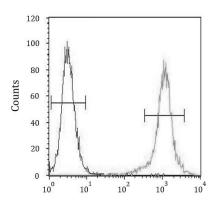
#### ARG55677 anti-Hemoglobin beta antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human liver tissue stained with ARG55677 anti-Hemoglobin beta antibody .



# ARG55677 anti-Hemoglobin beta antibody WB image

Western blot: 20  $\mu g$  of Human heart lysate stained with ARG55677 anti-Hemoglobin beta antibody at 1:2000 dilution.



# ARG55677 anti-Hemoglobin beta antibody FACS image

Flow Cytometry: K562 cells stained with ARG55677 anti-Hemoglobin beta antibody (right histogram) or without primary antibody as control (left histogram), followed by incubation with FITC labelled secondary antibody.