

## Basic Information

Product Name	Anti-Cytoglobin/CYGB Antibody
Gene Name	CYGB
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Cytoglobin, identical to the related rat sequence, different from the related mouse sequence by one amino acid.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	21 kDa
Dilution Ratios	Western blot (WB):1:500-2000

## Storage

12 months from date of receipt, -20°C as supplied.

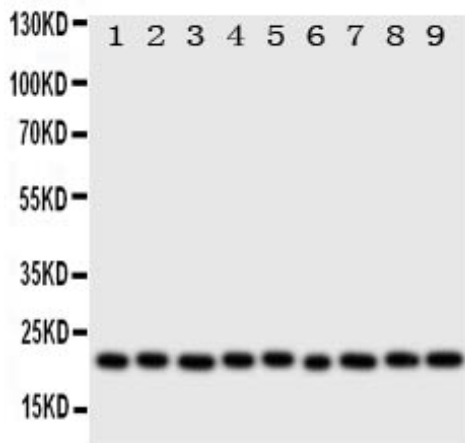
## Background Information

Cytoglobin(CYGB), also called HGB or STAP, is a ubiquitously expressed hexacoordinate hemoglobin that may facilitate diffusion of oxygen through tissues, scavenge nitric oxide or other reactive oxygen species, or serve a protective function during oxidative stress. The cytoglobin gene is mapped on 17q25.1. The CYGB gene contains 4 exons and spans about 9 kb. Cytoglobin has many elements common to vertebrate globins, including invariant histidine residues, and the amino acids that form the heme pocket share similarity with pentacoordinate myoglobin. In contrast to the high oxygen affinities displayed by most hexacoordinate hemoglobins, the characteristics of CYGB indicate that it can facilitate oxygen transport. Because the oxygen affinity of CYGB is more similar to myoglobin than to neuroglobin, and the oxy form of CYGB resists autooxidation, CYGB is proposed to represent a tissue oxygen reservoir by Sawai et al.

## Reference

Anti-Cytoglobin/CYGB Antibody 被引用在1文献中。

## Selected Validation Data



Western blot analysis of Cytoglobin/CYGB using anti-Cytoglobin/CYGB antibody (BA2150-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Rat brain tissue lysates,

Lane 2: Rat small intestine tissue lysates,

Lane 3: Rat liver tissue lysates,

Lane 4: Rat kidney tissue lysates,

Lane 5: SGC whole cell lysates,

Lane 6: COLO320 whole cell lysates,

Lane 7: SMMC whole cell lysates,

Lane 8: PANC whole cell lysates,

Lane 9: HELA whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Cytoglobin/CYGB antigen affinity purified polyclonal antibody (BA2150-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Cytoglobin/CYGB at approximately 21 kDa. The expected band size for Cytoglobin/CYGB is at 21 kDa.