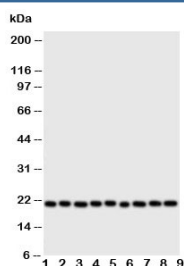


## Cytoglobin Antibody (R30742)

Catalog No.	Formulation	Size
R30742	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

**Bulk quote request**

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Format</b>	Antigen affinity purified
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Antigen affinity
<b>Buffer</b>	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
<b>UniProt</b>	Q8WWM9
<b>Applications</b>	Western Blot : 0.5-1ug/ml
<b>Limitations</b>	This Cytoglobin antibody is available for research use only.



Western blot testing of Cytoglobin antibody and Lane 1: rat brain; 2: (r) small intestine; 3: (r) liver; 4: (r) kidney; 5: human SGC; 6: (h) COLO320; 7: SMMC-7721; 8: PANC; 9: HeLa cell lysate. Predicted/observed molecular weight: ~21 kDa.

## Description

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 CYGB gene contains four 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.

## Application Notes

The stated application concentrations are suggested starting amounts. Titration of the Cytoglobin antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

An amino acid sequence from the N-terminus of human Cytoglobin (FVNFPSAKQYFSQFKHMED) was used as the immunogen for this Cytoglobin antibody (100% rat homology).

## Storage

After reconstitution, the Cytoglobin antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.