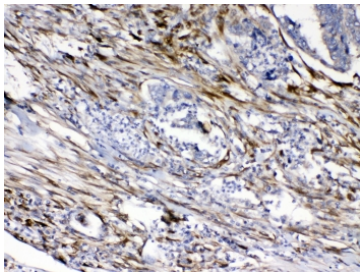
# Cytoglobin Antibody (R32779)

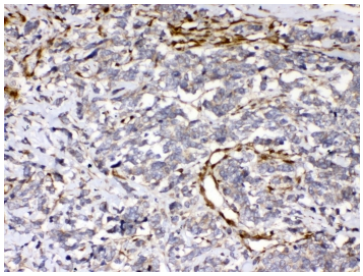
| Catalog No. | Formulation | Size |
|---|---|---|
| R32779 | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

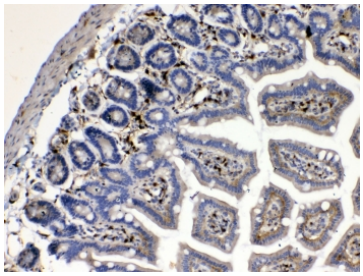
| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human, Mouse, Rat |
| **Format** | Antigen affinity purified |
| **Host** | Rabbit |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit IgG |
| **Purity** | Antigen affinity |
| **Buffer** | Lyophilized from 1X PBS with 2.5% BSA, 0.025% sodium azide |
| **UniProt** | Q8WWM9 |
| **Localization** | Cytoplasmic |
| **Applications** | WB: 0.5-1ug/ml<br>IHC (FFPE): 1-2ug/ml |
| **Limitations** | This Cytoglobin antibody is available for research use only. |



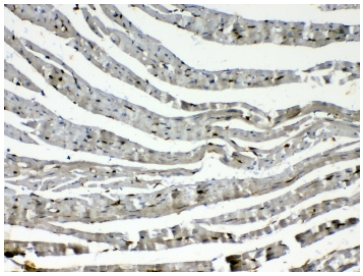
IHC testing of FFPE human intestinal cancer tissue with Cytoglobin antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



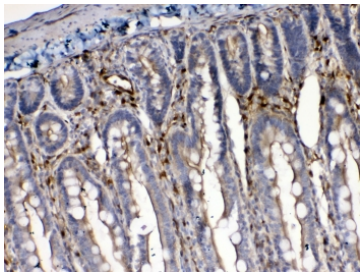
IHC testing of FFPE human lung cancer tissue with Cytoglobin antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



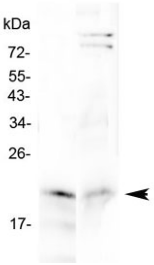
IHC testing of FFPE mouse intestine tissue with Cytoglobin antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



IHC testing of FFPE mouse heart tissue with Cytoglobin antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



IHC testing of FFPE rat intestine tissue with Cytoglobin antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.




Western blot testing of 1) rat small intestine and 2) mouse small intestine lysate with Cytoglobin antibody at 0.5ug/ml. Predicted 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 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.

## Application Notes

Optimal dilution of the Cytoglobin antibody should be determined by the researcher.

## Immunogen

Amino acids M1-P190 from the human protein were used as the immunogen for the Cytoglobin antibody.

## 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.


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