

**Cytoglobin Polyclonal Antibody**  
Catalog # AP74205**Specification****Cytoglobin Polyclonal Antibody - Product Information**

Application	IHC
Primary Accession	<a href="#">Q8WWM9</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

**Cytoglobin Polyclonal Antibody - Additional Information**

Gene ID 114757

**Other Names**

Cytoglobin (Histoglobin) (HGb) (Stellate cell activation-associated protein)

**Dilution**

IHC~~IHC-p 1:50-200, ELISA 1:10000-20000

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**Cytoglobin Polyclonal Antibody - Protein Information**Name CYGB ([HGNC:16505](#))**Function**

Probable multifunctional globin with a hexacoordinated heme iron required for the catalysis of various reactions depending on redox condition of the cell as well as oxygen availability (PubMed: [11893755](http://www.uniprot.org/citations/11893755), PubMed: [12359339](http://www.uniprot.org/citations/12359339), PubMed: [15165856](http://www.uniprot.org/citations/15165856), PubMed: [19147491](http://www.uniprot.org/citations/19147491), PubMed: [20511233](http://www.uniprot.org/citations/20511233), PubMed: [28393874](http://www.uniprot.org/citations/28393874), PubMed: [28671819](http://www.uniprot.org/citations/28671819), PubMed: [29128400](http://www.uniprot.org/citations/29128400), PubMed: [33576020](http://www.uniprot.org/citations/33576020), PubMed: [34930834](http://www.uniprot.org/citations/34930834)). Has a nitric oxide dioxygenase (NOD) activity and is most probably involved in cell-mediated and oxygen-dependent nitric oxide consumption (PubMed: [19147491](http://www.uniprot.org/citations/19147491), PubMed: [20511233](http://www.uniprot.org/citations/20511233), PubMed: [11893755](http://www.uniprot.org/citations/11893755)).

href="http://www.uniprot.org/citations/28393874" target="\_blank">28393874</a>, PubMed:<a href="http://www.uniprot.org/citations/28671819" target="\_blank">28671819</a>). By scavenging this second messenger may regulate several biological processes including endothelium-mediated vasodilation and vascular tone (PubMed:<a href="http://www.uniprot.org/citations/19147491" target="\_blank">19147491</a>, PubMed:<a href="http://www.uniprot.org/citations/28393874" target="\_blank">28393874</a>). Under normoxic conditions functions as a nitric oxide dioxygenase (NOD) but under hypoxic conditions the globin may switch its function to that of a nitrite (NO<sub>2</sub>) reductase (NiR), generating nitric oxide (PubMed:<a href="http://www.uniprot.org/citations/29128400" target="\_blank">29128400</a>). Could also have peroxidase and superoxide dismutase activities, detoxifying reactive oxygen species and protecting cells against oxidative stress (PubMed:<a href="http://www.uniprot.org/citations/12359339" target="\_blank">12359339</a>, PubMed:<a href="http://www.uniprot.org/citations/33576020" target="\_blank">33576020</a>, PubMed:<a href="http://www.uniprot.org/citations/34930834" target="\_blank">34930834</a>). Also binds dioxygen with low affinity and could function as an oxygen sensor but has probably no function as a respiratory oxygen carrier (PubMed:<a href="http://www.uniprot.org/citations/11893755" target="\_blank">11893755</a>, PubMed:<a href="http://www.uniprot.org/citations/15299006" target="\_blank">15299006</a>, PubMed:<a href="http://www.uniprot.org/citations/20553503" target="\_blank">20553503</a>).

#### **Cellular Location**

Cytoplasm. Nucleus

#### **Tissue Location**

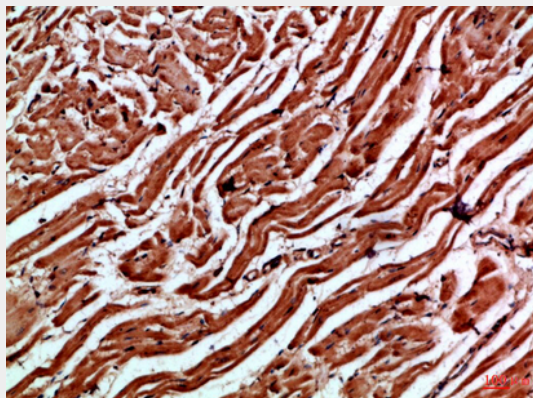
Widely expressed. Highest expression in heart, stomach, bladder and small intestine.

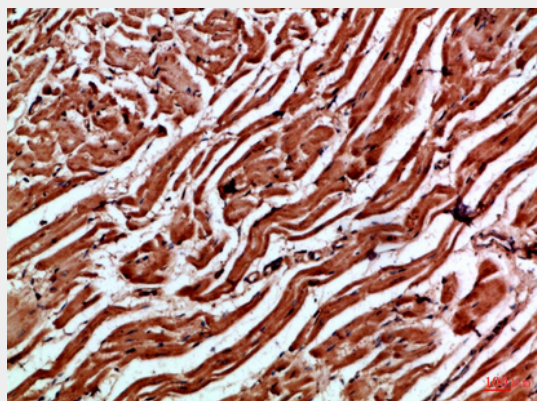
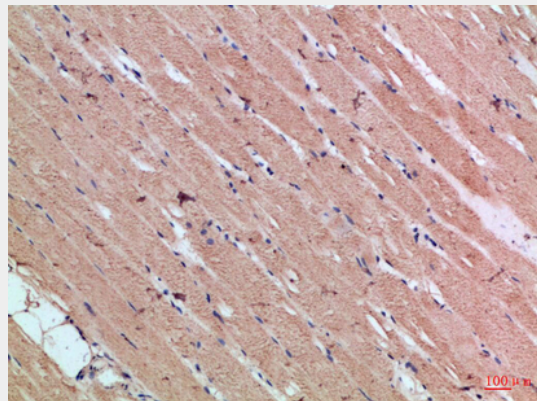
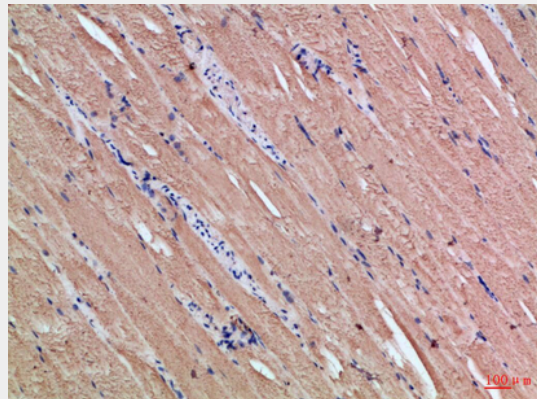
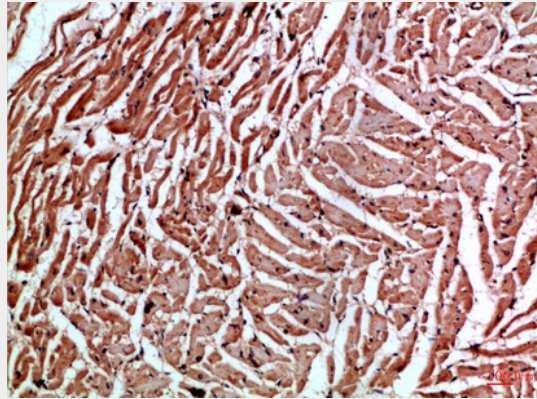
#### **Cytoglobin Polyclonal Antibody - Protocols**

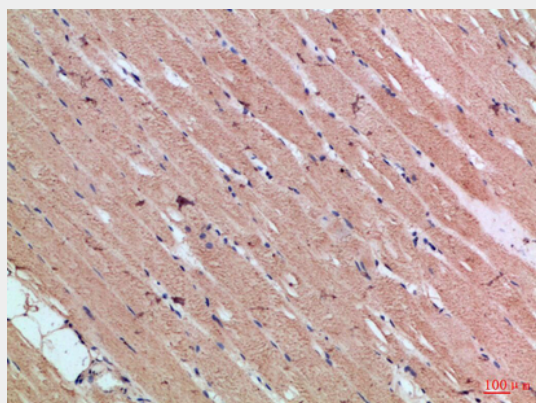
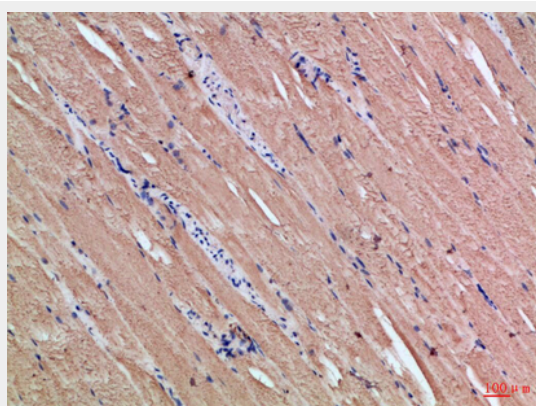
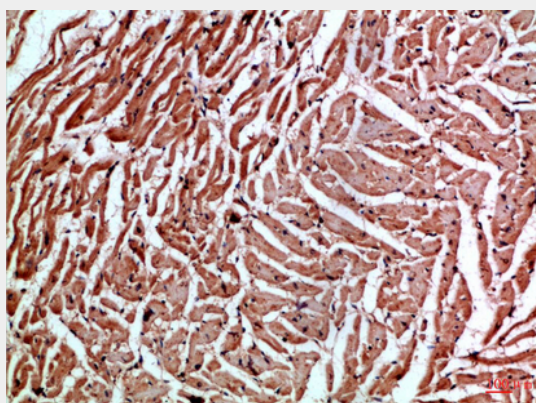
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **Cytoglobin Polyclonal Antibody - Images**







### **Cytoglobin Polyclonal Antibody - Background**

May have a protective function during conditions of oxidative stress. May be involved in intracellular oxygen storage or transfer.