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Cytoglobin Polyclonal Antibody

Catalog # AP74205

Product Information

Application	IHC-P, IF, ICC, E
Primary Accession	Q8WWM9
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21405

Additional Information

Gene ID	114757
Other Names	Cytoglobin (Histoglobin) (HGb) (Stellate cell activation-associated protein)
Dilution	IHC-P~~IHC-p 1:50-200, ELISA 1:10000-20000 IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

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, PubMed:12359339, PubMed:15165856, PubMed:19147491, PubMed:20511233, PubMed:28393874, PubMed:28671819, PubMed:29128400, PubMed:33576020, PubMed:34930834). Has a nitric oxide dioxygenase (NOD) activity and is most probably involved in cell-mediated and oxygen-dependent nitric oxide consumption (PubMed:19147491, PubMed:20511233, PubMed:28393874, PubMed:28671819). By scavenging this second messenger may regulate several biological processes including endothelium-mediated vasodilation and vascular tone (PubMed:19147491, PubMed:28393874). 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 (NO2) reductase (NiR), generating nitric oxide (PubMed:29128400). Could also have peroxidase and superoxide dismutase activities, detoxifying reactive oxygen species and protecting cells against oxidative stress (PubMed:12359339, PubMed:33576020, PubMed:34930834). Also binds dioxygen with low affinity and could function as an oxygen sensor but has probably no function as a respiratory oxygen carrier (PubMed:11893755,

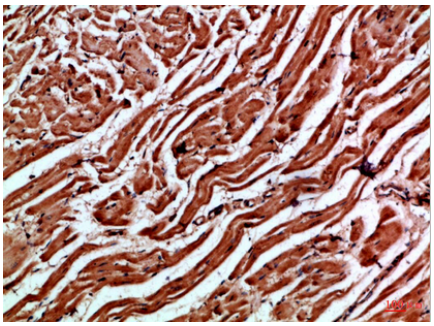
PubMed:15299006, PubMed:20553503).

Cellular Location	Cytoplasm. Nucleus
Tissue Location	Widely expressed. Highest expression in heart, stomach, bladder and small intestine.

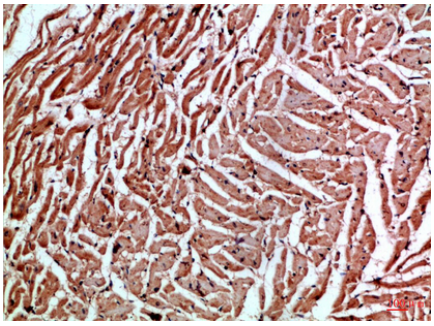
Background

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

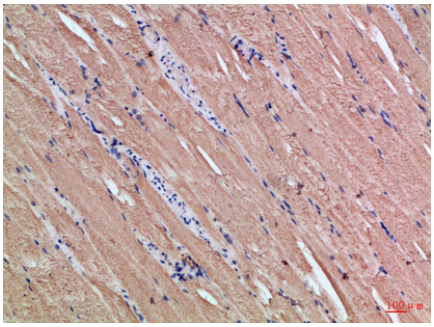
Images



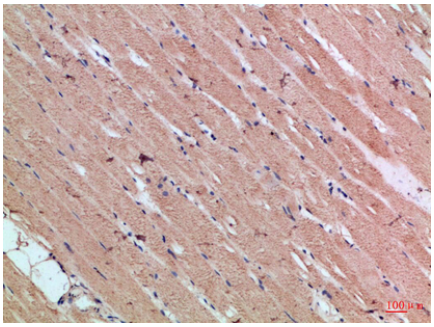
Immunohistochemical analysis of paraffin-embedded Human-heart, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded Human-heart, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded Human-skeletal-muscle, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded Human-skeletal-muscle, antibody was diluted at 1:100

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