

CYGB Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16031a

Specification

CYGB Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	Q8WWM9
Other Accession	NP_599030.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	21405
Antigen Region	1-30

CYGB Antibody (N-term) - Additional Information

Gene ID 114757

Other Names

Cytoglobin, Histoglobin, HGb, Stellate cell activation-associated protein, CYGB, STAP

Target/Specificity

This CYGB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human CYGB.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CYGB Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CYGB Antibody (N-term) - 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

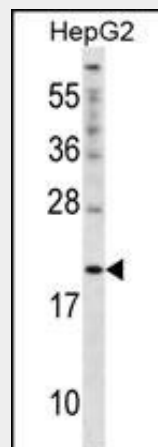
Widely expressed. Highest expression in heart, stomach, bladder and small intestine.

CYGB Antibody (N-term) - 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](#)

CYGB Antibody (N-term) - Images



CYGB Antibody (N-term) (Cat. #AP16031a) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the CYGB antibody detected the CYGB protein (arrow).

CYGB Antibody (N-term) - Background

Cytoglobin 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 (Trent and Hargrove, 2002 [PubMed 11893755]).

CYGB Antibody (N-term) - References

Gardner, A.M., et al. J. Biol. Chem. 285(31):23850-23857(2010)
Lechauve, C., et al. FEBS J. 277(12):2696-2704(2010)
Shaw, R.J., et al. Br. J. Cancer 101(1):139-144(2009)
Halligan, K.E., et al. J. Biol. Chem. 284(13):8539-8547(2009)
Ostojic, J., et al. Arch. Ophthalmol. 126(11):1530-1536(2008)