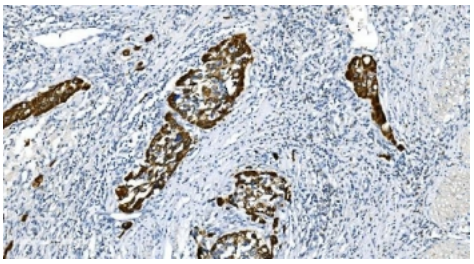
Glycine decarboxylase Antibody (RQ6128)

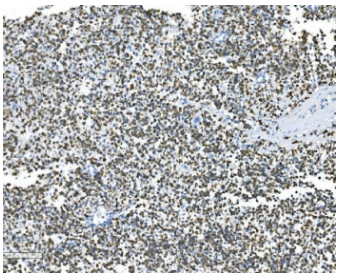
Catalog No.	Formulation	Size
RQ6128	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

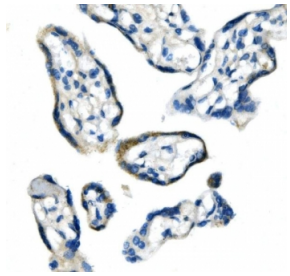
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P23378
Localization	Cytoplasmic
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml
Limitations	This Glycine decarboxylase antibody is available for research use only.



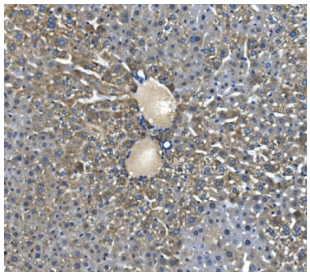
IHC staining of FFPE human bladder cancer with Glycine decarboxylase antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



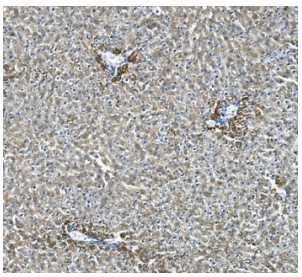
IHC staining of FFPE human testicular cancer with Glycine decarboxylase antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



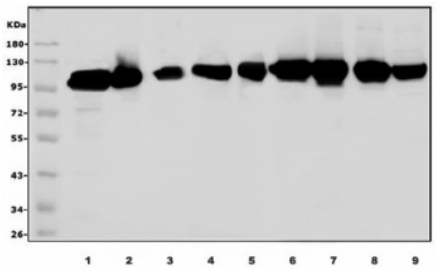
IHC staining of FFPE human placenta with Glycine decarboxylase antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



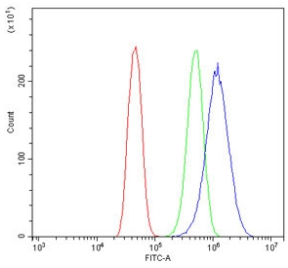
IHC staining of FFPE mouse liver with Glycine decarboxylase antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE rat liver with Glycine decarboxylase antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of human 1) HepG2, 2) placenta, 3) HEK293, 4) T-47D, 5) A549, 6) rat liver, 7) rat kidney, 8) mouse liver and 9) mouse kidney lysate with Glycine decarboxylase antibody. Predicted molecular weight ~113 kDa.



Flow cytometry testing of human Caco-2 cells with Glycine decarboxylase antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Glycine decarboxylase antibody.

Description

Glycine decarboxylase also known as glycine cleavage system P protein or glycine dehydrogenase is an enzyme that in humans is encoded by the GLDC gene. Degradation of glycine is brought about by the glycine cleavage system, which is composed of four mitochondrial protein components: P protein (a pyridoxal phosphate-dependent glycine decarboxylase), H protein (a lipoic acid-containing protein), T protein (a tetrahydrofolate-requiring enzyme), and L protein (a lipoamide dehydrogenase). The protein encoded by this gene is the P protein, which binds to glycine and enables the methylamine group from glycine to be transferred to the T protein. Defects in this gene are a cause of nonketotic hyperglycinemia (NKH).

Application Notes

Optimal dilution of the Glycine decarboxylase antibody should be determined by the researcher.

Immunogen

A human recombinant partial protein (amino acids K574-S1020) was used as the immunogen for the Glycine decarboxylase antibody.

Storage

After reconstitution, the Glycine decarboxylase 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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