

DMGDH Polyclonal Antibody

Catalog No :	YT1362
Reactivity :	Human;Rat;Mouse;
Applications :	WB;IHC;IF;ELISA
Target :	DMGDH
Fields :	>>Glycine, serine and threonine metabolism;>>Metabolic pathways
Gene Name :	DMGDH
Protein Name :	Dimethylglycine dehydrogenase mitochondrial
Human Gene Id :	29958
Human Swiss Prot No :	Q9UI17
Mouse Swiss Prot No :	Q9DBT9
Immunogen :	The antiserum was produced against synthesized peptide derived from human DMGDH. AA range:817-866
Specificity :	DMGDH Polyclonal Antibody detects endogenous levels of DMGDH protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 97kD

Cell Pathway : Glycine; serine and threonine metabolism;

Background : This gene encodes an enzyme involved in the catabolism of choline, catalyzing the oxidative demethylation of dimethylglycine to form sarcosine. The enzyme is found as a monomer in the mitochondrial matrix, and uses flavin adenine dinucleotide and folate as cofactors. Mutation in this gene causes dimethylglycine dehydrogenase deficiency, characterized by a fishlike body odor, chronic muscle fatigue, and elevated levels of the muscle form of creatine kinase in serum. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013],

Function : catalytic activity:N,N-dimethylglycine + acceptor + H(2)O = sarcosine + formaldehyde + reduced acceptor.,cofactor: Binds 1 FAD covalently per monomer.,disease: Defects in DMGDH are the cause of DMGDH deficiency (DMGDHD) [MIM:605850]. DMGDHD is a disorder characterized by fish odor, muscle fatigue with increased serum creatine kinase. Biochemically it is characterized by an increase of N,N-dimethylglycine (DMG) in serum and urine.,pathway: Amine and polyamine degradation; betaine degradation; sarcosine from betaine: step 2/2.,similarity: Belongs to the gcvT family.,subunit: Monomer.,

Subcellular Location : Mitochondrion.

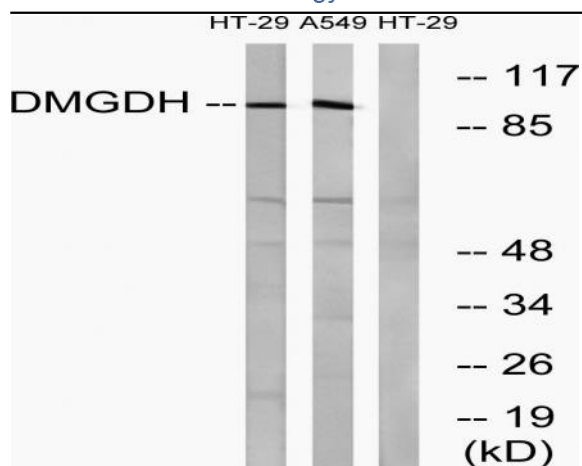
Location :

Expression : Kidney, Trachea,

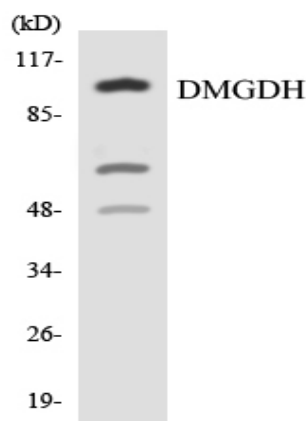
Products Images



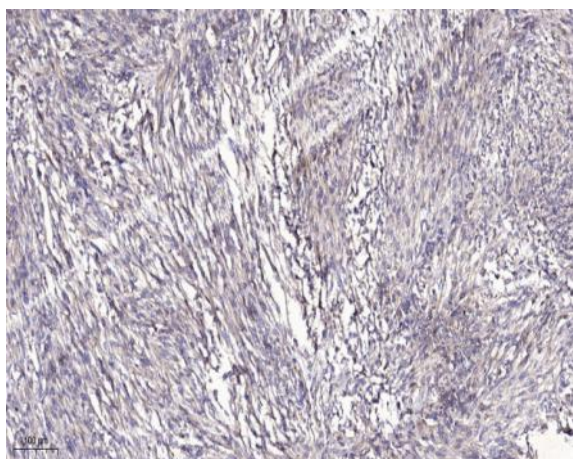
Western Blot analysis of various cells using DMGDH Polyclonal Antibody



Western blot analysis of lysates from HT-29 and A549 cells, using DMGDH Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HeLa cells using DMGDH antibody.



Immunohistochemical analysis of paraffin-embedded human Colon cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).