10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MUT Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22354a

Product Information

Application	WB, IF, IHC-P-Leica, E
Primary Accession	P22033
Other Accession	Q9GK13, Q8HXX1, P16332, Q5RFN2
Reactivity	Human, Mouse
Predicted	Mouse, Bovine
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB57882
Calculated MW	83134

Additional Information

Gene ID	4594
Other Names	Methylmalonyl-CoA mutase, mitochondrial, MCM, 5.4.99.2, Methylmalonyl-CoA isomerase, MUT
Target/Specificity	This MUT antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 32-66 amino acids from the human region of human MUT.
Dilution	WB~~1:2000 IF~~1:25 IHC-P-Leica~~1:250 E~~Use at an assay dependent concentration.
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	MUT Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MMUT (HGNC:7526)
Function	Catalyzes the reversible isomerization of methylmalonyl-CoA (MMCoA) (generated from branched-chain amino acid metabolism and degradation of

dietary odd chain fatty acids and cholesterol) to succinyl-CoA (3-carboxypropionyl-CoA), a key intermediate of the tricarboxylic acid cycle.

Cellular Location Mitochondrion matrix. Mitochondrion. Cytoplasm

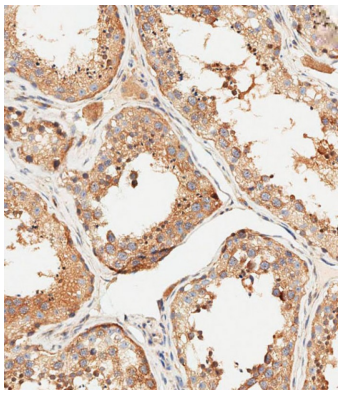
Background

Involved in the degradation of several amino acids, odd- chain fatty acids and cholesterol via propionyl-CoA to the tricarboxylic acid cycle. MCM has different functions in other species.

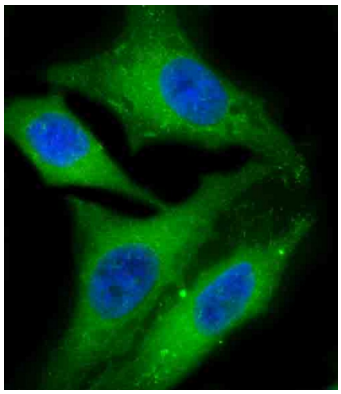
References

Jansen R.,et al.Genomics 4:198-205(1989).
Nham S.U.,et al.Genomics 8:710-716(1990).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Mungall A.J.,et al.Nature 425:805-811(2003).

Images

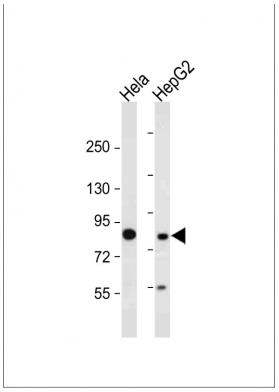


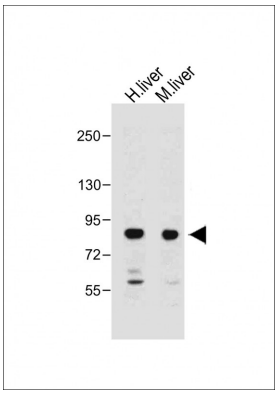
Immunohistochemical analysis of paraffin-embedded human testis tissue using AP22354a performed on the Leica® BOND RXm. Samples were incubated with primary antibody(1/250) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Hela (human cervical epithelial adenocarcinoma cell line) cells labeling MUT with AP22354a at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (1583138) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm and weak nucleus staining on Hela cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (PD18466410) at 1/100 dilution (red).The nuclear counter stain is DAPI (blue).

All lanes : Anti-MUT Antibody (N-Term) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 83 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





All lanes : Anti-MUT Antibody (N-Term) at 1:2000 dilution Lane 1: Human liver lysate Lane 2: Mouse liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 83 kDa Blocking/Dilution buffer: 5% NFDM/TBST.