

Fumarase (D9C5) Rabbit mAb

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IHC-P	H M R Hm Mk	Endogenous	49	Rabbit IgG	#P07954	2271

Product Usage Information**Application**

Western Blotting
Immunohistochemistry (Paraffin)

Dilution

1:1000
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Fumarase (D9C5) Rabbit mAb recognizes endogenous levels of total fumarase protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly354 of human fumarase protein.

Background

Fumarate hydratase (Fumarase, FH) is canonically regarded as a mitochondrial enzyme of the tricarboxylic acid cycle that catalyzes fumarate to malate (1,2). Studies have demonstrated that deficiencies in FH can lead to hereditary leiomyomatosis and renal cell cancer (1,3) or, in homozygous germline mutations, severe neurological and muscular disorders (1,2). There also exists a cytosolic fumarase isoenzyme that is involved in DNA damage repair (3).

Background References

1. Isaacs, J.S. et al. (2005) *Cancer Cell* 8, 143-53.
2. Bourgeron, T. et al. (1994) *J Clin Invest* 93, 2514-8.
3. Yogev, O. et al. (2010) *PLoS Biol* 8, e1000328.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IHC-P:** Immunohistochemistry (Paraffin)

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Hm:** Hamster **Mk:** Monkey

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