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FLAD1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9198b

Product Information

Application	WB, E
Primary Accession	Q8NFF5
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23920
Calculated MW	65266
Antigen Region	551-580

Additional Information

Gene ID	80308
Other Names	FAD synthase, FAD pyrophosphorylase, FMN adenylyltransferase, Flavin adenine dinucleotide synthase, Molybdenum cofactor biosynthesis protein-like region, FAD synthase region, FLAD1
Target/Specificity	This FLAD1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 551-580 amino acids from the C-terminal region of human FLAD1.
Dilution	WB~~1:1000 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	FLAD1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FLAD1
Function	This enzyme has two activities: FAD diphosphatase activity and FAD synthase activity (PubMed:16643857, PubMed:21924249, PubMed:21951714,

PubMed:23443125, PubMed:25135855, PubMed:26277395, PubMed:27259049, PubMed:31351152, PubMed:38688286). FAD diphosphatase acts on FAD and NADH to produce FMN and NMNH(2-), respectively (PubMed:26277395, PubMed:31351152, PubMed:38688286). FAD synthase catalyzes the adenylation of flavin mononucleotide (FMN) to form flavin adenine dinucleotide (FAD) coenzyme (PubMed:16643857, PubMed:21924249, PubMed:21951714, PubMed:23443125, PubMed:27259049, PubMed:38688286). In addition to its catalytic activities, the protein also facilitates the delivery of FAD to client apo-flavoproteins (PubMed:25954742). The balance between FAD synthesis and hydrolysis may be regulated by redox- sensing cysteine residues (PubMed:25135855, PubMed:26277395). At a much lower rate, FAD synthase catalyzes the reverse pyrophosphorolytic reaction (PubMed:21951714, PubMed:23443125, PubMed:25135855, PubMed:26277395). FAD synthase can also convert roseoflavin mononucleotide (RoFMN) to roseoflavin adenine dinucleotide (RoFAD); RoFMN is produced by riboflavin kinase when acting on the antibiotic roseoflavin (RoF) (PubMed:21924249). FAD synthase cannot convert 8- demethyl-8-amino-riboflavin mononucleotide (AFMN) to 8-demethyl-8-amino-riboflavin adenine dinucleotide (AFAD); AFMN is produced by riboflavin kinase when acting on the antibiotic 8-demethyl-8-amino- riboflavin (AF) (PubMed:21924249).

Cellular Location Nucleus. [Isoform 2]: Cytoplasm, cytosol

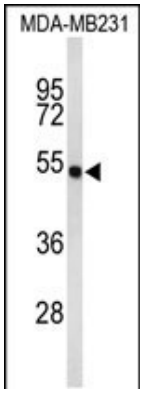
Background

FLAD1 encodes the enzyme that catalyzes adenylation of flavin mononucleotide (FMN) to form flavin adenine dinucleotide (FAD) coenzyme.

References

Lin,J., et.al., J. Neurol. 256 (5), 774-782 (2009)
Brizio,C., et.al., Biochem. Biophys. Res. Commun. 344 (3), 1008-1016 (2006)

Images



Western blot analysis of FLAD1 Antibody (C-term) (Cat. #AP9198b) in MDA-MB231 cell line lysates (35ug/lane). FLAD1 (arrow) was detected using the purified Pab.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.