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

MECR Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5107

Product Information

Application	WB
Primary Accession	Q9BV79
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40462
Isotype	Rabbit IgG
Antigen Source	Human

Additional Information

Gene ID	51102
Antigen Region	201-229
Other Names	MECR;NBRF1; Trans-2-enoyl-CoA reductase, mitochondrial; Trans-2-enoyl-CoA reductase, mitochondrial; Nuclear receptor-binding factor 1
Dilution	WB~~1:1000
Target/Specificity	This MECR antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 201-229 amino acids from the Central region of human MECR.
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	MECR Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

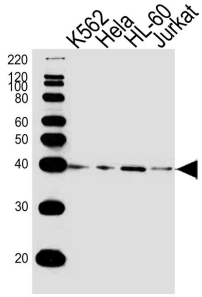
Name	MECR
Synonyms	NBRF1

Function	Catalyzes the NADPH-dependent reduction of trans-2-enoyl thioesters in mitochondrial fatty acid synthesis (fatty acid synthesis type II). Fatty acid chain elongation in mitochondria uses acyl carrier protein (ACP) as an acyl group carrier, but the enzyme accepts both ACP and CoA thioesters as substrates in vitro. Displays a preference for medium-chain over short- and long-chain substrates (PubMed:12654921, PubMed:18479707, PubMed:27817865). May provide the octanoyl chain used for lipoic acid biosynthesis, regulating protein lipoylation and mitochondrial respiratory activity particularly in Purkinje cells (By similarity). Involved in iron homeostasis; affecting Fe-S cluster assembly and ceramide metabolism (PubMed:37653044). Required for proper morphology and bioenergetic functions of mitochondria (PubMed:37653044). Required for maintenance of neurons (By similarity).
Cellular Location	[Isoform 1]: Mitochondrion
Tissue Location	Highly expressed in skeletal and heart muscle. Expressed at lower level in placenta, liver, kidney and pancreas Weakly or not expressed in lung.

Background

Catalyzes the reduction of trans-2-enoyl-CoA to acyl-CoA with chain length from C6 to C16 in an NADPH-dependent manner with preference to medium chain length substrate. May have a role in the mitochondrial synthesis of fatty acids.

Images



Western blot analysis of lysates from K562,Hela,HL-60,Jurkat cell line (from left to right), using MECR Antibody (Center)(Cat. #AW5107). AW5107 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.Lysates at 20ug per lane.

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