

# 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

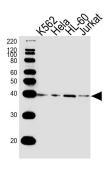
**Tissue Location** Highly expressed in skeletal and heart muscle. Expressed at lower level in

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'.