

MECR Antibody (C-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS16739**Specification**

MECR Antibody (C-Terminus) - Product Information

Application	IHC, WB
Primary Accession	O9BV79
Other Accession	51102
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	40462

MECR Antibody (C-Terminus) - Additional Information**Gene ID** 51102**Other Names**

MECR, CGI-63, FASN2B, HsNrnf-1, NBRF1, NRBF-1, NRBF1

Target/Specificity

At least two isoforms of MECR are known to exist; this antibody will detect both isoforms.

Reconstitution & Storage

PBS, 0.02% sodium azide. Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

MECR Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

MECR Antibody (C-Terminus) - Protein Information**Name** MECR**Synonyms** NRBF1**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](http://www.uniprot.org/citations/12654921), PubMed: [18479707](http://www.uniprot.org/citations/18479707), PubMed: [27817865](http://www.uniprot.org/citations/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

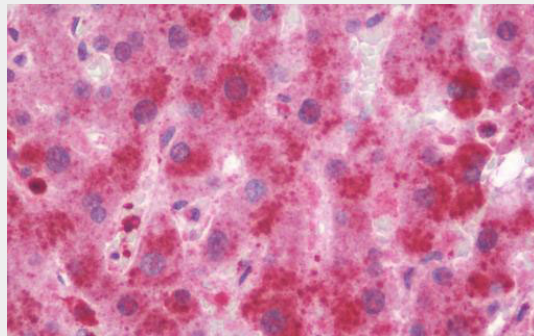
Highly expressed in skeletal and heart muscle. Expressed at lower level in placenta, liver, kidney and pancreas Weakly or not expressed in lung.

MECR Antibody (C-Terminus) - Protocols

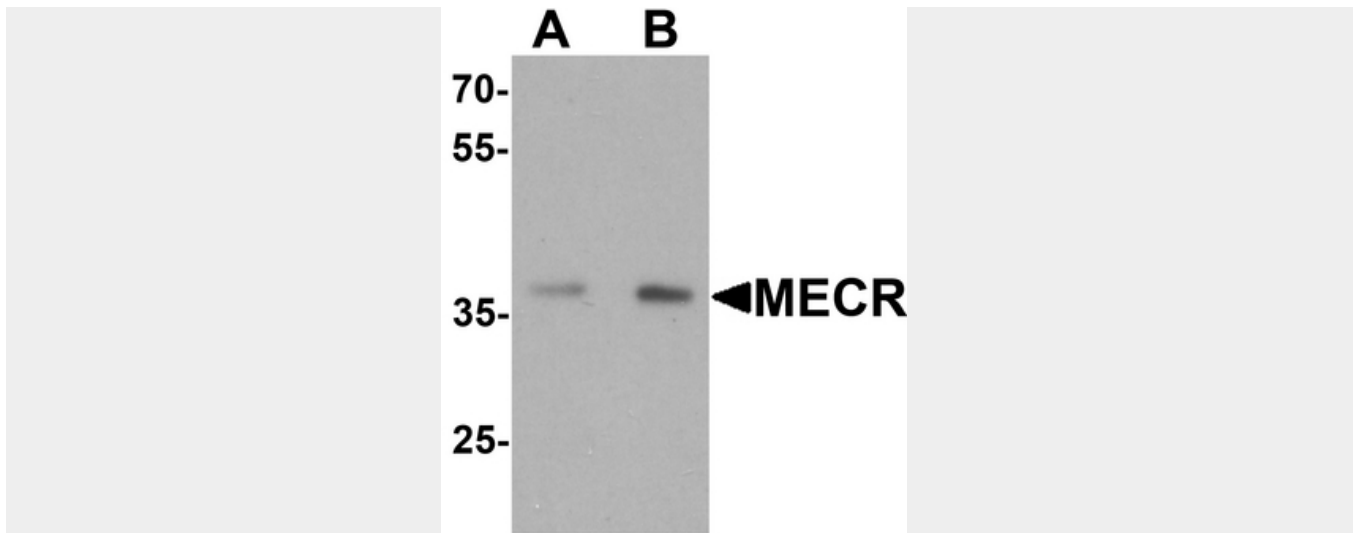
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

MECR Antibody (C-Terminus) - Images



Anti-MECR antibody IHC staining of human liver.



Western blot analysis of MECR in human brain tissue lysate with MECR antibody at (A) 1 and (B) 2...

MECR Antibody (C-Terminus) - Background

Oxidoreductase with a preference for short and medium chain substrates, including trans-2-hexenoyl-CoA (C6), trans-2-decenoyl-CoA (C10), and trans-2-hexadecenoyl-CoA (C16). May play a role in mitochondrial fatty acid synthesis.

MECR Antibody (C-Terminus) - References

Lai C.-H., et al. *Genome Res.* 10:703-713(2000).
Ota T., et al. *Nat. Genet.* 36:40-45(2004).
Ebert L., et al. Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Gregory S.G., et al. *Nature* 441:315-321(2006).
Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.