## For Research Use Only

## MECR Recombinant antibody

Catalog Number:84729-4-RR



**Basic Information** 

Catalog Number: GenBank Accession Number:

84729-4-RR BC003864

GeneID (NCBI): Size: 100ul , Concentration: 1000 ug/ml by 26922 Nanodrop:

**UNIPROT ID:** Q9DCS3 Rabbit Full Name:

Isotype: mitochondrial trans-2-enoyl-CoA

reductase IgG Immunogen Catalog Number: Calculated MW:

AG0465 40 kDa

Observed MW:

37-40 kDa

**Applications** 

**Tested Applications:** WB, IHC, IF/ICC, ELISA

Species Specificity: human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: NIH/3T3 cells, HeLa cells, mouse heart tissue, rat

**Purification Method:** 

Protein A purfication

Recommended Dilutions:

WB 1:5000-1:50000

IF/ICC 1:500-1:2000

IHC 1:200-1:800

CloneNo.:

242151C5

heart tissue, mouse stomach tissue

IHC: mouse heart tissue. IF/ICC: NIH/3T3 cells,

## **Background Information**

Mitochondrial 2-enoyl-acyl-carrier protein reductase (MECR) is an enzyme in the mitochondrial fatty acid synthase (mtFAS) pathway. MECR is involved in the synthesis of lipoic acid and is required for mitochondrial respiratory competence. MECR is highly expressed in skeletal and heart muscles and exhibits lower expression in placenta, liver, kidney, and pancreas. It is weakly expressed or not expressed in the lung (PMID: 32440681, PMID: 37734847, PMID: 38296034).

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

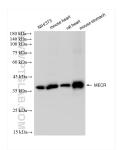
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

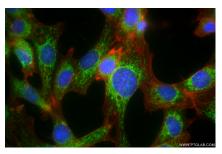
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

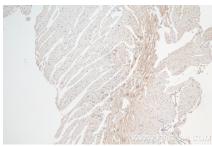
## **Selected Validation Data**



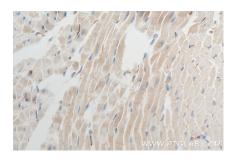
Various lysates were subjected to SDS PAGE followed by western blot with 84729-4-RR (MECR antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



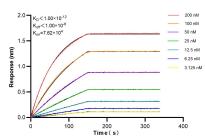
Immunofluorescent analysis of (4% PFA) fixed NIH/3T3 cells using MECR antibody (84729-4-RR, Clone: 242151C5) at dilution of 1:1000 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 84729-4-RR (MECR antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 84729-4-RR (MECR antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 84729-4-RR against Mouse MECR were performed. The affinity constant is below 1 pM.