

**EPRS Mouse mAb[25ZN]**

**Cat NO. :A12886**

**Information:**

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB,IHC,ICC/IF	H,M,R	P07814	171kDa	Mouse	IgG	50ul 100ul,200ul

**Applications detail:**

Application	Dilution
WB	1:1000-2000
IHC	1:100
ICC/IF	1:100
The optimal dilutions should be determined by the end user	

**Conjugate:**

UnConjugate

**Form:**

Liquid

**sensitivity:**

Endogenous

**Purification:**

Protein A purification

**Specificity:**

Antibody is produced by immunizing animals with a synthetic peptide of human EPRS.

**Storage buffer and conditions:**

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt.Avoid repeated freeze / thaw cycles.

**Tissue specificity:**

**Subcellular location:**

Cytoplasm, cytosol. Membrane,Peripheral membrane protein.

**Function:**

Multifunctional protein which is primarily part of the aminoacyl-tRNA synthetase multienzyme complex, also know as multisynthetase complex, that catalyzes the attachment of the cognate amino acid to the corresponding tRNA in a two-step reaction: the amino acid is first activated by ATP to form a covalent intermediate with AMP and is then transferred to the acceptor end of the cognate tRNA (PubMed:1756734, PubMed:24100331, PubMed:23263184). The phosphorylation of EPRS1, induced by interferon-gamma, dissociates the protein from the aminoacyl-tRNA synthetase multienzyme complex and recruits it to the GAIT complex that binds to stem loop-containing GAIT elements in the 3'-UTR of diverse inflammatory mRNAs (such as ceruplasmin), suppressing their

**Introduction:** **WB:** Western Blot **IP:** Immunoprecipitation **IHC:** Immunohistochemistry **ChIP:** Chromatin Immunoprecipitation **ICC/IF:** Immunocytochemistry/Immunofluorescence **F:** Flow Cytometry

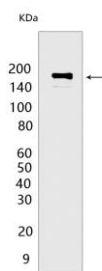
**Cross Reactivity:** **H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Ml:** mink **C:** chicken **Dm** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Hr:** horse

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translation. Interferon-gamma can therefore redirect, in specific cells, the EPRS1 function from protein synthesis to translation inhibition (PubMed:15479637, PubMed:23071094). Also functions as an effector of the mTORC1 signaling pathway by promoting, through SLC27A1, the uptake of long-chain fatty acid by adipocytes. Thereby, it also plays a role in fat metabolism and more indirectly influences lifespan (PubMed:28178239)..

## Validation Data:

### EPRS Mouse mAb[25ZN] Images



Western blot (SDS PAGE) analysis of extracts from HT-29 cells. Using EPRS Mouse mAb IgG [25ZN] at dilution of 1:1000 incubated at 4°C over night.

View more information on <http://naturebios.com>

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 1% w/v Milk, 1X TBST at 4°C overnight.