

**CISD1/mitoNEET (D5M4C) Rabbit mAb**

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H M R	Endogenous	12	Rabbit IgG	#Q9NZ45	55847

**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation

**Dilution**

1:1000  
1:200

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

CISD1/mitoNEET (D5M4C) Rabbit mAb recognizes endogenous levels of total CISD1/mitoNEET protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Asp61 of human CISD1/mitoNEET protein.

**Background**

CDGSH iron-sulfur domain-containing protein 1 (CISD1), also known as mitochondrial outer membrane iron-sulfur (2Fe-2S) protein (mitoNEET) was first identified as the target for the drug pioglitazone, used to treat diabetes (1-3). CISD1/mitoNEET regulates both mitochondrial iron transport into the matrix and mitochondrial respiratory capacity. It has also been shown to affect the dynamics of cellular and whole-body lipid homeostasis (2,4). Furthermore, research studies have shown that CISD1/mitoNEET is overexpressed in human epithelial breast cancer cells and it has been considered a potential chemotherapeutic target (6).

**Background References**

1. Colca, J.R. et al. (2004) *Am J Physiol Endocrinol Metab* 286, E252-60.
2. Wiley, S.E. et al. (2007) *Proc Natl Acad Sci U S A* 104, 5318-23.
3. Wiley, S.E. et al. (2007) *J Biol Chem* 282, 23745-9.
4. Kusminski, C.M. et al. (2012) *Nat Med* 18, 1539-49.
5. Sohn, Y.S. et al. (2013) *Proc Natl Acad Sci U S A* 110, 14676-81.
6. Bai, F. et al. (2015) *Proc Natl Acad Sci U S A* 112, 3698-703.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **IP:** Immunoprecipitation

**Cross-Reactivity Key**

**H:** Human **M:** Mouse **R:** Rat

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