

#89326 Store at -20C

UCP2 (D105V) Rabbit mAb



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB	H M R Mk	Endogenous	32	Rabbit IgG	#P55851	7351

Product Usage Information

Application

Western Blotting

Dilution

1:1000

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

UCP2 (D105V) Rabbit mAb recognizes endogenous levels of total UCP2 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly153 of human UCP2 protein.

Background

Uncoupling protein 2 (UCP2) is a mitochondrial inner membrane transport protein that is expressed in a wide range of tissues (1). UCP2 inhibits mitochondrial glucose oxidation and promotes glycolysis in human pluripotent stem cells (hPSCs) (2). During early differentiation of hPSCs, the expression of UCP2 is repressed, which results in reduced glycolysis (2). This demonstrates a role for UCP2 in the metabolic reprogramming during differentiation of hPSCs (2). Overexpression of UCP2 in cancer cells stimulates oxidative phosphorylation in mitochondria and inhibits cell proliferation (3).

Background References

1. Mailloux, R.J. et al. (2011) *J Biol Chem* 286, 21865-75.
2. Zhang, J. et al. (2011) *EMBO J* 30, 4860-73.
3. Esteves, P. et al. (2014) *Cancer Res* 74, 3971-82.

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 nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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