

**UCP3 (D6J8K) Rabbit mAb**

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<b>Applications:</b> W, IP	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 30	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #P55916	<b>Entrez-Gene Id:</b> 7352
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**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation

**Dilution**

1:1000  
1:50

**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**

UCP3 (D6J8K) Rabbit mAb recognizes endogenous levels of total UCP3 protein. This antibody does not cross-react with UCP1 or UCP2 proteins.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly110 of human UCP3 protein.

**Background**

Uncoupling protein 3 (UCP3), a mitochondrial inner membrane transport protein, is highly expressed in skeletal muscle and activates glucose transport in muscle cells (2). UCP3 lowers the production of reactive oxygen species in mitochondria by reducing the mitochondrial inner membrane potential (3). UCP3 has been implicated in the protection against fat-induced insulin resistance in skeletal muscle (4) and fat gain induced by high-fat feeding (1).

**Background References**

1. Costford, S.R. et al. (2008) *Am J Physiol Endocrinol Metab* 295, E1018-24.
2. Huppertz, C. et al. (2001) *J Biol Chem* 276, 12520-9.
3. Gustafsson, H. et al. (2004) *J Neurosci Res* 77, 285-91.
4. Choi, C.S. et al. (2007) *J Clin Invest* 117, 1995-2003.

**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**

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

**Cross-Reactivity Key**

**H:** Human

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