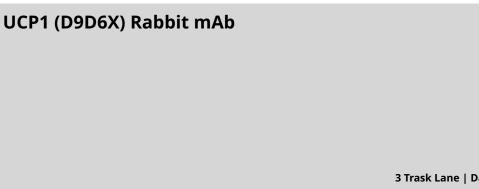
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Applications: W, IP	Reactivity: M	Sensitivity: Endogenous	MW (kDa): 30	Source/Isotype: Rabbit IgG	UniProt ID: #P25874	Entrez-Gene Id: 7350	
Product Usage Information		Application Western Blotting Immunoprecipitation			Dilution 1:1000 1:50		
Storage		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/Sen	sitivity	UCP1 (D9D6X) Rabbit mAb recognizes endogenous levels of total UCP1 protein. This antibody does not cross-react with UCP2 and UCP3 proteins.					
Species predict based on 100% homology		Human					
Source / Purific	ation	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human UCP1 protein.					
Background		Uncoupling protein 1 (UCP1) is a mitochondrial inner membrane transport protein that is primarily expressed in brown adipose tissue (BAT). UCP1 dissipates the pH gradient resulting from oxidative phosphorylation, which uncouples ATP synthesis from oxidative phosphorylation and leads to the release of heat energy. As a result, UCP1 plays an important role in thermogenesis (reviewed in 1). Research studies indicate that subcutaneous white adipose depots in mice contain beige adipocytes that express low levels of UCP1 protein (2). Additional studies show possible differences in thermogenesis in individuals carrying specific polymorphisms in the corresponding <i>UCP1</i> gene (3). Related studies link UCP1 to the possible development of obesity and type 2 diabetes (4).					
Background Re	ferences	1. Azzu, V. and Brand, M.D. (2010) <i>Trends Biochem Sci</i> 35, 298-307. 2. Wu, J. et al. (2012) <i>Cell</i> 150, 366-76. 3. Nagai, N. et al. (2003) <i>J Clin Endocrinol Metab</i> 88, 5661-7. 4. Brondani, L.A. et al. (2012) <i>Arq Bras Endocrinol Metabol</i> 56, 215-25.					
Species Reactiv	vity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).					
Western Blot B	uffer	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 Ke	ey	W: Western Blotting IP: Immunoprecipitation					
Cross-Reactivit	у Кеу	M: Mouse					
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