

Product name:	Z02 /TJP2
Cat number:	AB-81679
Size:	100 ug
Clone:	POLY
Concentration:	1mg/ml
Host:	Rb
Isotype:	IgG
Immunogen:	A synthetic peptide of human UCP2
Reactivity:	Hu,Ms,Rt
Applications:	Western Blot: 1:500 - 1:2000
Molecular Weight:	33kDa
Purification:	Aff. Pur.
Form:	Liquid
Buffer:	PBS with 0.02% sodium azide,50% glycerol,pH7.3.
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Background:	Mitochondrial uncoupling proteins (UCP) are members of the larger family of mitochondrial anion carrier proteins (MACP). UCPs separate oxidative phosphorylation from ATP synthesis with energy dissipated as heat, also referred to as the mitochondrial proton leak. UCPs facilitate the transfer of anions from the inner to the outer mitochondrial membrane and the return transfer of protons from the outer to the inner mitochondrial membrane. They also reduce the mitochondrial membrane potential in mammalian cells. Tissue specificity occurs for the different UCPs and the exact methods of how UCPs transfer H⁺/OH⁻ are not known. UCPs contain the three homologous protein domains of MACPs. This gene is expressed in many tissues, with the greatest expression in skeletal muscle. It is thought to play a role in nonshivering thermogenesis, obesity and diabetes. Chromosomal order is 5'-UCP3-UCP2-3'.