

## Product datasheet for **TP318901L**

### UCP1 (NM\_021833) Human Recombinant Protein

#### Product data:

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Purified recombinant protein of Human uncoupling protein 1 (mitochondrial, proton carrier) (UCP1), nuclear gene encoding mitochondrial protein, full length, with C-terminal MYC/DDK tag, expressed in HEK293 cells, 1 mg
<b>Species:</b>	Human
<b>Expression Host:</b>	HEK293
<b>Expression cDNA Clone or AA Sequence:</b>	>RC218901 representing NM_021833 <span style="color: red;">Red</span> =Cloning site <span style="color: green;">Green</span> =Tags(s)  MGGLTASDVHPTLGVQLFSAGIAACLADVITFPLDTAKVRLQVQGECPSTSSVIRYKGVLTITAVVKTEG RMKLYSGLPAGLQRQISSASLRIGLYDTVQEFLTAGKETAPSLGSKILAGLTGGVAVFIGQPTEVVKVR LQAQSHLHGKIPRYGTYNAYRIIATTEGLTGLWKGTTPNLMRSVIINCTELVTDLMKEAFVKNNILAD DVPCHLVSALIAGFCATAMSSPVDVVKTRFINSPPGQYKSVPCAMKVFTNEGPTAFFKGLVPSFLRLGS WNVIMFVCFEQLKRELSKSRQTMDCAT  <span style="color: red;">TRTRPLEQKLISEEDLAANDILDYKDDDDKV</span>
<b>Tag:</b>	C-Myc/DDK
<b>Predicted MW:</b>	32.8 kDa
<b>Concentration:</b>	>0.05 µg/µL as determined by microplate BCA method
<b>Purity:</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Buffer:</b>	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
<b>Preparation:</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<u><a href="#">NP_068605</a></u>



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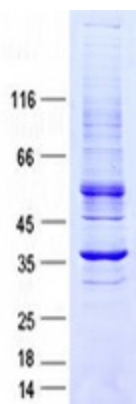
Locus ID: 7350  
UniProt ID: [P25874](#)  
RefSeq Size: 1047  
Cytogenetics: 4q31.1  
RefSeq ORF: 921  
Synonyms: SLC25A7; UCP

**Summary:** Mitochondrial uncoupling proteins (UCP) are members of the 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<sup>+</sup>/OH<sup>-</sup> are not known. UCPs contain the three homologous protein domains of MACPs. This gene is expressed only in brown adipose tissue, a specialized tissue which functions to produce heat. [provided by RefSeq, Jul 2008]

**Protein Families:** Druggable Genome

**Protein Pathways:** Huntington's disease, PPAR signaling pathway

### Product images:



Coomassie blue staining of purified UCP1 protein (Cat# [TP318901]). The protein was produced from HEK293T cells transfected with UCP1 cDNA clone (Cat# [RC218901]) using MegaTran 2.0 (Cat# [TT210002]).