UCP2 Polyclonal ANTIBODY
Catalog Number: 11081-1-AP

Basic Information

Catalog Number: 11081-1-AP
Size: 45 μg/150 μl
Source: Rabbit
Isotype: IgG
Purification Method: Antigen affinity purification
Immunogen Catalog Number: AG1551

GenBank Accession Number: BCO11737
GeneID (NCBI): 7351
Full Name: uncoupling protein 2 (mitochondrial, proton carrier)
Calculated MW: 33 kDa
Observed MW: 28-30 kDa

Recommended Dilutions: WB 1:500-1:2000

Applications

Tested Applications: WB, ELISA
Cited Applications: IF, IHC, WB
Species Specificity: human, mouse, rat

Positive Controls:
WB: mouse skeletal muscle tissue, human skeletal muscle tissue, Jurkat cells, mouse heart tissue, rat skeletal muscle tissue, mouse spleen tissue

Background Information

UCP2 (uncoupling protein 2) is a member of the mitochondrial carrier protein super family located in the mitochondrial inner membrane. The UCPs differ greatly in tissue distribution: UCP1 is expressed only in brown adipose; UCP3 preferentially in skeletal muscle, brown adipose and heart; UCP4 and UCP5 mainly in the nervous system (18167556). In contrast, UCP2 has a broad distribution and is implicated in a wide range of pathophysiological processes, including diabetes and cancer. This antibody detects a band around 28-33 kDa corresponding to UCP2 protein in mouse liver, skeletal muscle and pancreas. Some upper and lower bands also were observed due to the dimer formation and degradation of the UCP2 protein (20103532). This antibody was raised against the full-length UCP2 protein and may cross-react with UCP3. It is notable that UCP2 is known to have a very short half-life less than 1 hour (17240372). It is strongly recommended that fresh-made lysate be used for western blot assays.

Notable Publications

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<th>Author</th>
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<td>Hong Zhong</td>
<td>30235442</td>
<td>Cell Physiol Biochem</td>
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<td>María Rodríguez-Hidalgo</td>
<td>30228311</td>
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<td>Yukiko Watamoto</td>
<td>31189782</td>
<td>Growth Horm IGF Res</td>
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Storage

Storage: Store at -20°C. Stable for one year after shipment.
Storage Buffer: PBS with 0.1% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage.

For technical support and original validation data for this product please contact:
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mouse skeletal muscle tissue were subjected to SDS PAGE followed by western blot with 11081-1AP/UCP2 antibody (at dilution of 1:1000) incubated at room temperature for 1.5 hours.