



Datasheet for ABIN675413
anti-UCP1 antibody (AA 101-200)



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Overview

| | |
|----------------------|---|
| Quantity: | 100 µL |
| Target: | UCP1 |
| Binding Specificity: | AA 101-200 |
| Reactivity: | Human, Mouse, Rat, Goat |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This UCP1 antibody is un-conjugated |
| Application: | Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Flow Cytometry (FACS), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro)) |

Product Details

| | |
|-----------------------|---|
| Immunogen: | KLH conjugated synthetic peptide derived from human UCP-1 |
| Isotype: | IgG |
| Cross-Reactivity: | Goat, Human, Mouse, Rat |
| Predicted Reactivity: | Dog,Cow,Sheep,Horse,Rabbit |
| Purification: | Purified by Protein A. |

Target Details

| | |
|---------|------|
| Target: | UCP1 |
|---------|------|

Target Details

| | |
|-------------------|---|
| Alternative Name: | UCP-1 (UCP1 Products) |
| Background: | <p>Synonyms: Ucp, Slc25a7, AI385626, Mitochondrial brown fat uncoupling protein 1, UCP 1, Solute carrier family 25 member 7, Thermogenin, Ucp1</p> <p>Background: UCP are mitochondrial transporter proteins that create proton leaks across the inner mitochondrial membrane, thus uncoupling oxidative phosphorylation from ATP synthesis. As a result, energy is dissipated in the form of heat.</p> |
| Gene ID: | 22227 |
| UniProt: | P12242 |
| Pathways: | Proton Transport, Brown Fat Cell Differentiation |

Application Details

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|--------------------|--|
| Application Notes: | <p>WB 1:300-5000</p> <p>ELISA 1:500-1000</p> <p>FCM 1:20-100</p> <p>IHC-P 1:200-400</p> <p>IHC-F 1:100-500</p> <p>IF(IHC-P) 1:50-200</p> <p>IF(IHC-F) 1:50-200</p> <p>IF(ICC) 1:50-200</p> |
| Restrictions: | For Research Use only |

Handling

| | |
|--------------------|--|
| Format: | Liquid |
| Concentration: | 1 µg/µL |
| Buffer: | 0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol. |
| Preservative: | ProClin |
| Precaution of Use: | This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only. |
| Storage: | 4 °C,-20 °C |
| Storage Comment: | Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles. |
| Expiry Date: | 12 months |

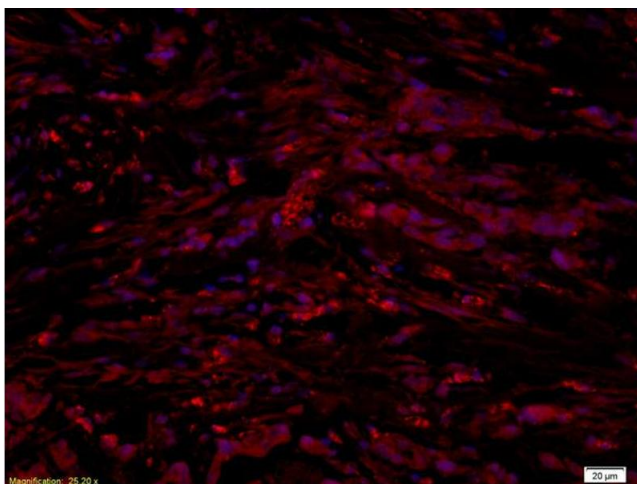
Product cited in:

Hou, Shi, Cao, Xu, Hu, Wang: "Pig has no uncoupling protein 1." in: **Biochemical and biophysical research communications**, Vol. 487, Issue 4, pp. 795-800, (2017) ([PubMed](#)).

Sun, Zeng, Cao, Song, Zhang, Liu: "Vibration Training Triggers Brown Adipocyte Relative Protein Expression in Rat White Adipose Tissue." in: **BioMed research international**, Vol. 2015, pp. 919401, (2015) ([PubMed](#)).

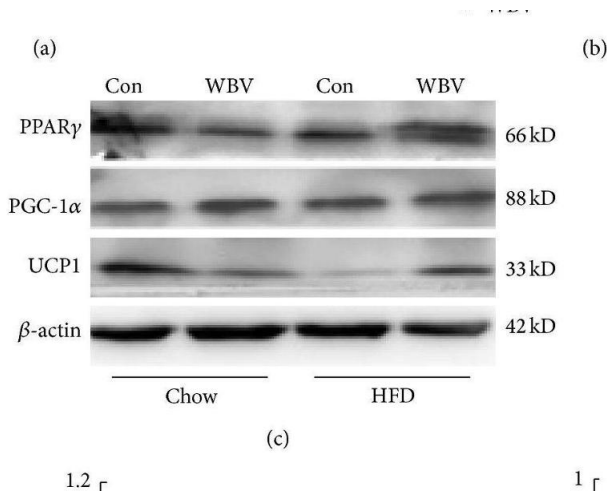
Lu, Ji, Zhang, Zhang, Zhang, An, Liu, Zheng: "Resistance to obesity by repression of VEGF gene expression through induction of brown-like adipocyte differentiation." in: **Endocrinology**, Vol. 153, Issue 7, pp. 3123-32, (2012) ([PubMed](#)).

Images



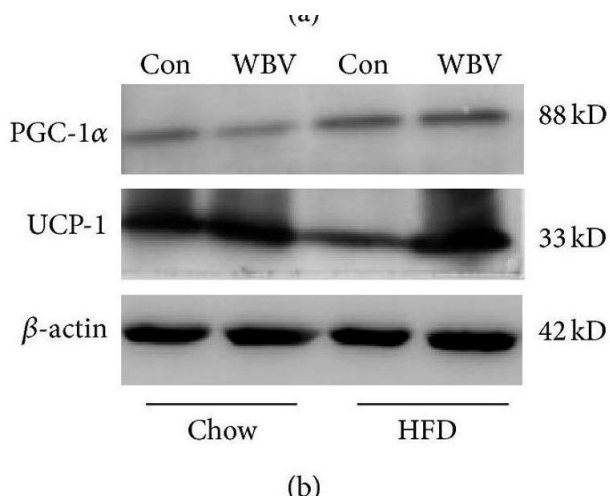
Immunofluorescence

Image 1. Formalin-fixed and paraffin embedded human gastric cancer labeled with Anti-UCP-1 Polyclonal Antibody, Unconjugated (ABIN675413) at 1:300 followed by conjugation to the secondary antibody and DAPI staining



Western Blotting

Image 2. ATP content and BAT associated protein level in intrascapular BAT. (a) The weight of BAT in the different groups (n = 6). (b) ATP content in rat BAT (n = 6). (c) Western blot analysis of UCP1, PGC-1α, and PPARγ in rat BAT. (d) UCP1, PGC-1α, and PPARγ protein content is normalized to β-actin protein content. Values are means ± SEM, n = 3. P < 0.05 and P < 0.01 versus control group. - figure provided by CiteAb. Source: PMID26125027



Western Blotting

Image 3. Protein expression of UCP1 and PGC-1α in WAT. (a) UCP1 and PGC-1α were detected by immunohistochemistry. Single UCP1 and PGC-1α immunoreactive adipocyte were closely associated with brown adipocytes (arrows). Scale bar: 40μm, magnification, x400. (b) Western blot analysis of UCP1 and PGC-1α in rat BAT. (c) UCP1 and PGC-1α protein content is normalized to β-actin protein content. Values are means ± SEM, n = 3. P < 0.05 and P < 0.01 versus control group. - figure provided by CiteAb. Source: PMID26125027

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN675413.