

UCP3 Polyclonal Antibody

Product Details	
Size	100 µg
Species Reactivity	Dog, Mouse, Rat
Published Species	Rat, Mouse, Human
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Synthetic peptide corresponding to residues C R(295) A L M K V Q V L R E S P F(308) of mouse and rat UCP-3.
Form	Liquid
Concentration	1 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS with 1mg/mL BSA
Contains	0.05% sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2213925

Applications	Tested Dilution	Publications
Western Blot (WB)	0.5-2 µg/mL	26 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

PA1-055 detects uncoupling protein-3 (UCP-3) mouse, rat, and canine tissues. This antibody will also detect recombinant human UCP-3, but does not detect UCP-3 from mouse liver or kidney.

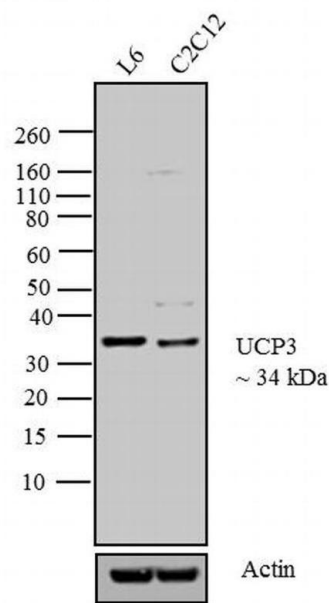
PA1-055 has been successfully used in Western blot procedures. By Western blot, this antibody detects an ~30 kDa protein representing UCP-3 from rat heart homogenate.

The PA1-055 immunogen is a synthetic peptide corresponding to residues C R(295) A L M K V Q V L R E S P F(308) of mouse and rat UCP-3. This peptide differs from the porcine and human UCP-3 sequence by a single amino acid substitution. PA1-055 immunizing peptide (Cat. # PEP-074) is available for use in neutralization and control experiments.

Product Images For UCP3 Polyclonal Antibody

UCP3 Antibody (PA1-055) in WB

Western blot analysis was performed on membrane enriched extracts (30 µg lysate) of L6 (Lane 1) and C2C12 (Lane 2). The blot was probed with Anti-UCP3 Rabbit Polyclonal Antibody (Product # PA1-055, 1 µg/mL) and detected by chemiluminescence using Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, HRP conjugate (Product # A27036, 0.4 µg/mL, 1:2500 dilution). A 34 kDa band corresponding to UCP3 was observed across the cell lines tested. Known quantity of protein samples were electrophoresed using Novex® NuPAGE® ; 12% Bis-Tris gel (Product # NP0342BOX), XCell SureLock™ Electrophoresis System (Product # EI0002) and Novex® Sharp Pre-Stained Protein Standard (Product # LC5800). Resolved proteins were then transferred onto a nitrocellulose membrane with iBlot® 2 Dry Blotting System (Product # IB21001). The membrane was probed with the relevant primary and secondary Antibody following blocking with 5 % skimmed milk. Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).



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Western Blot (26)

<p>Cells</p> <p>Oxygen Consumption and Basal Metabolic Rate as Markers of Susceptibility to Malignant Hyperthermia and Heat Stroke.</p> <p>"Published figure using UCP3 polyclonal antibody (Product # PA1-055) in Western Blot"</p> <p>Authors: Serano M,Pietrangelo L,Paolini C,Guarnier FA,Protasi F</p>	<p>Year 2022</p> <p>Species Mouse</p> <p>Dilution 1:1000</p>
<p>Metabolites</p> <p>Switching to a Standard Chow Diet at Weaning Improves the Effects of Maternal and Postnatal High-Fat and High-Sucrose Diet on Cardiometabolic Health in Adult Male Mouse Offspring.</p> <p>"PA1-055 was used in Protein Assay to test that switching to a standard chow diet after weaning would attenuate systemic metabolic disorders and cardiac and mitochondrial dysfunction associated with maternal and postnatal high-fat /high-sucrose (HFHS) diet in mice."</p> <p>Authors: Chiñas Merlin A,Gonzalez K,Mockler S,Perez Y,Jia UA,Chicco AJ,Ullevig SL,Chung E</p>	<p>Year 2022</p> <p>Species Mouse</p>

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Miscellaneous PubMed (1)

<p>American journal of physiology. Endocrinology and metabolism</p> <p>Skeletal muscle dysfunction is associated with derangements in mitochondrial bioenergetics (but not UCP3) in a rodent model of sepsis.</p> <p>"Published figure using UCP3 polyclonal antibody (Product # PA1-055) in Western Blot"</p> <p>Authors: Zolfaghari PS,Carré JE,Parker N,Curtin NA,Duchen MR,Singer M</p>	<p>Year 2015</p> <p>Species Mouse</p> <p>Dilution 1:1000</p>
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