Product Datasheet

CRAT Antibody - BSA Free
NBP1-86616

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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Publications: 2

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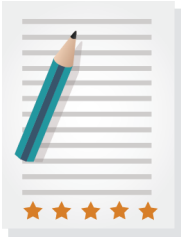
Updated 3/4/2026 v.20.1



NBP1-86616

CRAT Antibody - BSA Free

Product Information

Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Affinity purified
Buffer	PBS (pH 7.2) and 40% Glycerol

Product Description

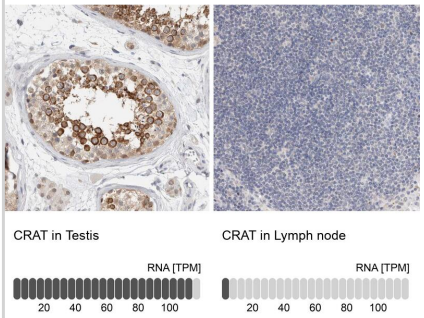
Host	Rabbit
Gene ID	1384
Gene Symbol	CRAT
Species	Human
Immunogen	This antibody was developed against Recombinant Protein corresponding to amino acids: RWFDKTLQFIVAEDGSCGLVYEHAAAEGPPIVTLLDYVIEYTKKPELVRSPMVP LPMPKKLRFNITPEIKSDIEKAKQNLSIMIQDLDITVMVFHHFGKDF

Product Application Details

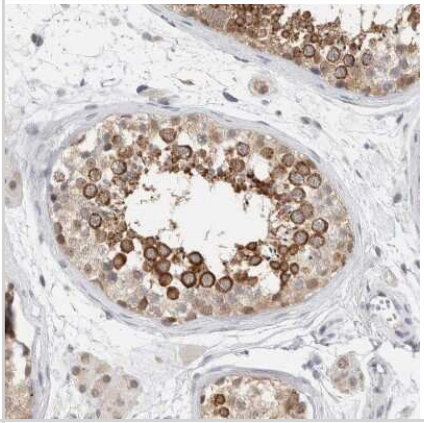
Applications	Western Blot, Immunohistochemistry-Paraffin, Immunohistochemistry
Recommended Dilutions	Western Blot 0.04-0.4 ug/ml, Immunohistochemistry 1:200 - 1:500, Immunohistochemistry-Paraffin 1:200 - 1:500
Application Notes	For IHC-Paraffin, HIER pH 6 retrieval is recommended.

Images

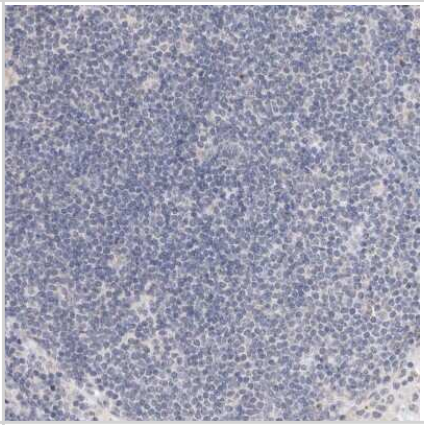
Analysis in human testis and lymph node tissues Corresponding CRAT RNA-seq data are presented for the same tissues.



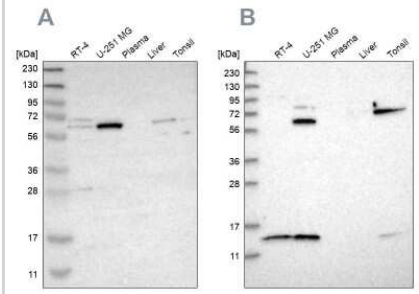
Immunohistochemistry-Paraffin: CRAT Antibody [NBP1-86616] - Staining of human testis shows moderate to strong cytoplasmic positivity in cells in seminiferous ducts.



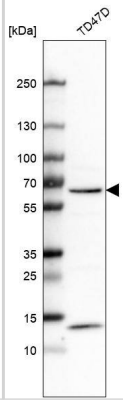
Immunohistochemistry-Paraffin: CRAT Antibody [NBP1-86616] - Staining of human lymph node shows no positivity as expected.



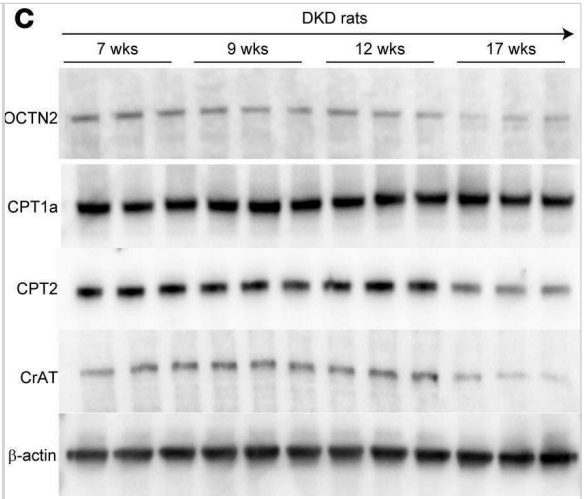
Western Blot: CRAT Antibody [NBP1-86616] - Analysis using Anti-CRAT antibody NBP1-86616 (A) shows similar pattern to independent antibody NBP1-86615 (B).



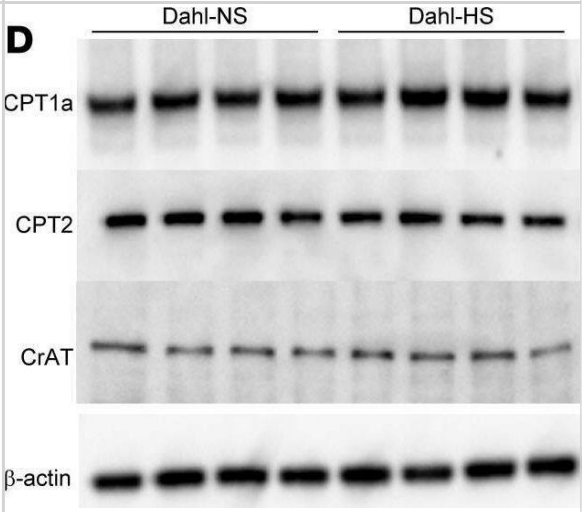
Analysis in human cell line TD47D.



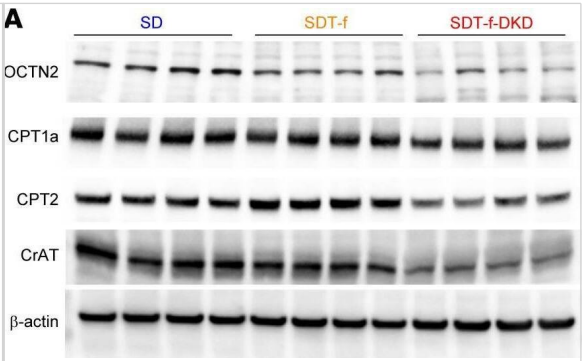
Reduced FAO enzymes and morphological changes in mitochondria following the decline in OCTN2 occur in SDT-f-DKD rats.(A) Plasma free Car (nmol/L) and (B) ratio of short-chain Acyl-C/middle-to-long-chain Acyl-C over the time course of SDT-f-DKD. (C) Western blots for OCTN2, CPT1a, CPT2, CrAT, and β-actin in the kidneys of SDT-f-DKD rats and (D) corresponding quantitation over the time course of SDT-f-DKD. n = 4, respectively. (E) Real-time PCR for Tmlhe in the kidneys of SDT-f-DKD rats at 7, 9, 12, and 17 weeks. n = 4, respectively. (F) Representative images of Oil Red O staining, immunofluorescence staining for KIM-1, and Picrosirius red staining over the time course of SDT-f-DKD and (G) the corresponding quantitation for Oil Red O+ area/cortex (%), KIM-1+/cortex (%), and collagen deposition area/cortex (%). Scale bar: 50 μm. n = 4, respectively. Data are presented as means +/- SD. One-way ANOVA with Tukey's post hoc test (A, B, D, E, and G) were performed to determine P value. **P < 0.01, ***P < 0.001, and ****P < 0.0001. Tmlhe, trimethyllysine hydroxylase, epsilon; wks, weeks; LTL, lotus tetragonolobus lectin. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/40402578), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Salt-sensitive hypertension partially induces PTC carnitine deficiency with reduced plasma free Car.(A) Line graph shows systolic BP (mmHg) over time in Dahl-NS (n = 6), Dahl-HS (n = 7), and Dahl-HS+L-car (n = 6). (B) Plasma free Car (nmol/L) and (C) ratio of short-chain Acyl-C/middle-to-long-chain Acyl-C. (D) Western blots for CPT1a, CPT2, CrAT, and β-actin in the kidneys of Dahl-NS and Dahl-HS and (E) corresponding quantitation. n = 4, respectively. (F) Representative images for OCTN2 and (G) the corresponding quantitation for OCTN2+/HPF (%) in Dahl-NS (n = 6), Dahl-HS (n = 7), and Dahl-HS+L-car (n = 6). Scale bar, 50 μm. (H) Real-time PCR for Tmlhe in the kidneys of Dahl-NS and Dahl-HS. n = 4, respectively. (I) Representative images of Oil Red O staining, immunofluorescence staining for KIM-1, and Picrosirius red staining in Dahl-NS, Dahl-HS, and Dahl-HS+L-car. Scale bar, 50 μm. (J) The corresponding quantitation for Oil Red O+ area/cortex (%), KIM-1+/cortex (%), and collagen+ area/cortex (%). n = 4, respectively. Data are presented as means +/- SD. Unpaired, 2-tailed Student's t test (B, C, E, and H) and 1-way ANOVA with Tukey's post hoc test (G and J) were performed to determine P value. *P < 0.05, ***P < 0.001, ****P < 0.0001. NS, normal salt. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/40402578), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



FAO-related transporter and enzymes are reduced in SDT-f-DKD rats. (A) Western blots for OCTN2, CPT1a, CPT2, CrAT, and β-actin in the kidneys of SD, SDT-f, and SDT-f-DKD rats. (B) Quantification of OCTN2/β-actin, (C) CPT1a/β-actin, (D) CPT2/β-actin, and (E) CrAT/β-actin in SD (n = 4), SDT-f (n = 4), and SDT-f-DKD rats (n = 4). (F) Western blots for p-AMPK, AMPK, PGC-1α, and β-actin in SD, SDT-f, and SDT-f-DKD rats. (G) Ratio of p-AMPK/AMPK and (H) quantification of PGC-1α /β-actin in SD (n = 4), SDT-f (n = 4), and SDT-f-DKD rats (n = 4). Data are presented as means +/- SD. One-way ANOVA with Tukey's post hoc test (B–E, G, and H) were performed to determine P value. *P < 0.05, **P < 0.01, and ***P < 0.001. OCTN2, organic cation transporter 2; CPT1a, carnitine palmitoyltransferase 1a; CPT2, carnitine palmitoyltransferase 2; CrAT, carnitine acetyltransferase; p-AMPK, phosphorylated AMP-activated protein kinase; PGC-1α, peroxisome proliferator–activated receptor-γ coactivator-1α. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/40402578), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Song MJ, Park CH, Kim H et al. Carnitine acetyltransferase deficiency mediates mitochondrial dysfunction-induced cellular senescence in dermal fibroblasts Aging cell 2023-10-13 [PMID: 37828898] (WB, Human)

Lasheras-Otero I, Feliu I, Maillo A et al. The regulators of peroxisomal acyl-carnitine shuttle CROT and CRAT promote metastasis in melanoma Journal of Investigative Dermatology 2022-09-01 [PMID: 36058299] (KD, WB, Human)

Details:
Supplementary figure 4

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Products Related to NBP1-86616

NBP1-86616PEP	CRAT Recombinant Protein Antigen
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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