

Product datasheet

Anti-Chromogranin A antibody [EPR22537-248] ab254322

Recombinant RabMAb

9 Images

Overview

Product name	Anti-Chromogranin A antibody [EPR22537-248]
Description	Rabbit monoclonal [EPR22537-248] to Chromogranin A
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P, IHC-Fr, ICC/IF Unsuitable for: IP
Species reactivity	Reacts with: Mouse, Rat
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Neuro-2a and PC12 whole cell lysates; mouse serum; mouse adrenal gland lysate; rat adrenal gland lysate. IHC-P: Mouse pancreas tissue; rat pancreas tissue. IHC-Fr: Mouse colon tissue; rat colon tissue. ICC/IF: Neuro-2a and PC12 cells. Flow Cyt (intra): Neuro-2a cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, PBS
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR22537-248
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab254322 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

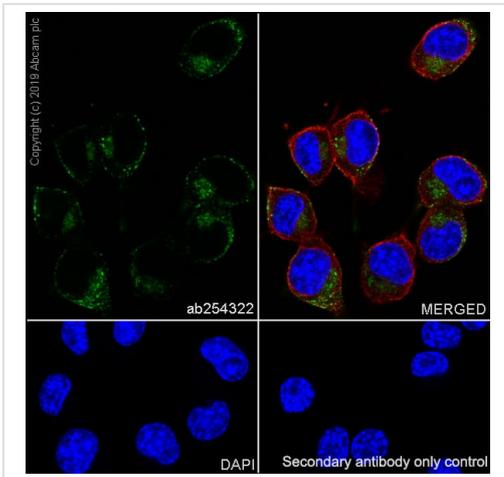
Application	Abreviews	Notes
Flow Cyt (Intra)		1/60.
WB		1/1000. Detects a band of approximately 20, 75 kDa (predicted molecular weight: 50 kDa).
IHC-P		1/4000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IHC-Fr		1/500. Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).
ICC/IF		1/100.

Application notes Is unsuitable for IP.

Target

Function	Pancreastatin strongly inhibits glucose induced insulin release from the pancreas.
Sequence similarities	Belongs to the chromogranin/secretogranin protein family.
Post-translational modifications	Sulfated on tyrosine residues and/or contains sulfated glycans. O-glycosylated with core 1 or possibly core 8 glycans.
Cellular localization	Secreted. Neuroendocrine and endocrine secretory granules.
Form	According to the Swiss-Prot database, this protein has many different forms which correspond to various molecular weights; thus the possible variation from the predicted molecular weight of 51kDa.

Images

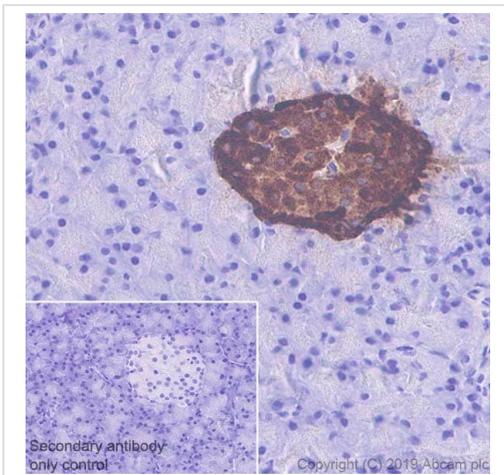


Immunocytochemistry/ Immunofluorescence - Anti-Chromogranin A antibody [EPR22537-248] (ab254322)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Neuro-2a (mouse neuroblastoma cell line) cells labeling Chromogranin A with ab254322 at 1/100 dilution, followed by a Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green).

Confocal image showing membranous and cytoplasmic staining in Neuro-2a cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (ab195889) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Chromogranin A antibody [EPR22537-248] (ab254322)

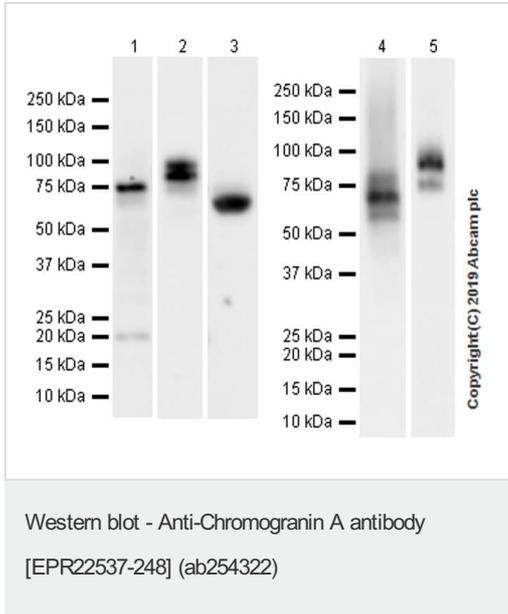
Immunohistochemical analysis of paraffin-embedded rat pancreas tissue labeling Chromogranin A with ab254322 at 1/4000 dilution, followed by Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on rat pancreas islet (PMID: 22412953) is observed. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

The section was incubated with ab254322 for 30 mins at RT.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



All lanes : Anti-Chromogranin A antibody [EPR22537-248] (ab254322) at 1/1000 dilution

Lane 1 : Neuro-2a (mouse neuroblastoma cell line) whole cell lysate

Lane 2 : PC-12 (rat adrenal gland pheochromocytoma cell line) whole cell lysate

Lane 3 : Mouse serum

Lane 4 : Mouse adrenal gland lysate

Lane 5 : Rat adrenal gland lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 50 kDa

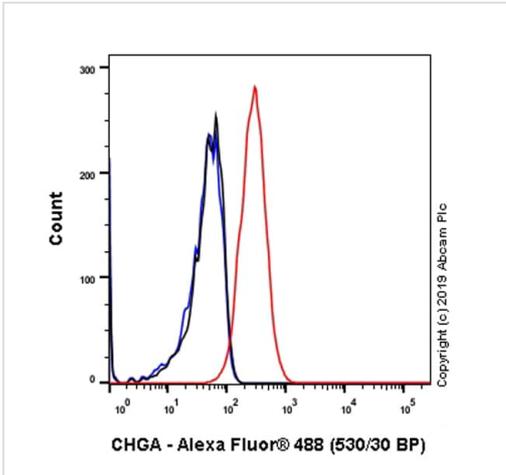
Observed band size: 20,75 kDa

Blocking and dilution buffer: 5% NFDm/TBST.

Exposure times.

Lane 1: 15 seconds; Lane 2: 3.25 seconds; Lane 3: 26 seconds; Lane 4: 3.25 seconds; Lane 5: 15 seconds.

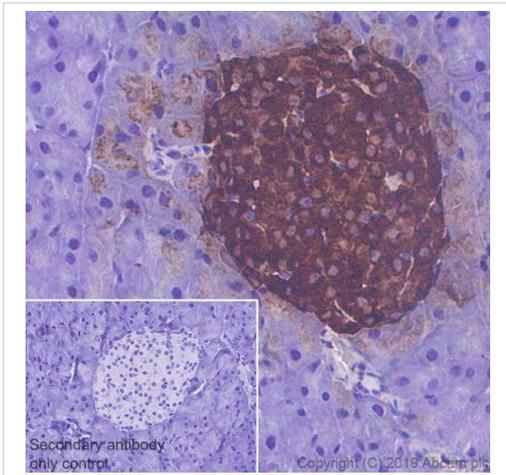
The molecular weight observed is consistent with what has been described in the literature (PMID: 14734658, 21052719).



Flow Cytometry (Intracellular) - Anti-Chromogranin A antibody [EPR22537-248] (ab254322)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized Neuro-2a (mouse neuroblastoma cell line) cells labeling Chromogranin A with ab254322 at 1/60 (red) compared with Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (blue).

Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077), at 1/2000 dilution was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Chromogranin A antibody [EPR22537-248] (ab254322)

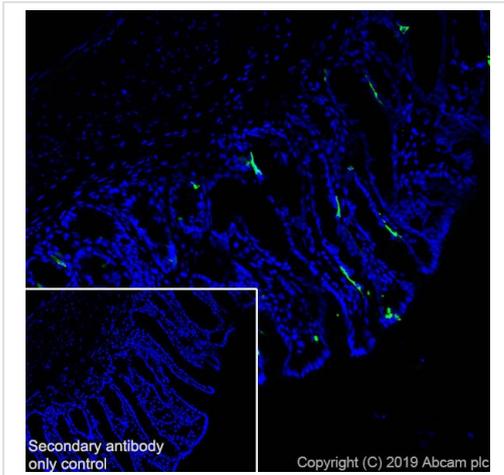
Immunohistochemical analysis of paraffin-embedded mouse pancreas tissue labeling Chromogranin A with ab254322 at 1/4000 dilution, followed by Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on mouse pancreas islet (PMID: 22412953) is observed. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

The section was incubated with ab254322 for 30 mins at RT.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

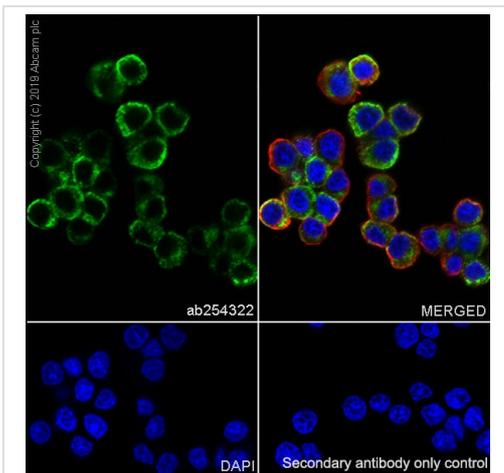


Immunohistochemistry (Frozen sections) - Anti-Chromogranin A antibody [EPR22537-248] (ab254322)

Frozen section of 4% PFA-fixed, 0.2% Triton X-100 permeabilized rat colon tissue labeling Chromogranin A with ab254322 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (ab150077), at 1/1000 dilution (green). Positive staining on enteroendocrine cells of mouse colon (PMID: 27287799) is observed. The nuclear counter stain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (ab150077), at 1/1000 dilution.

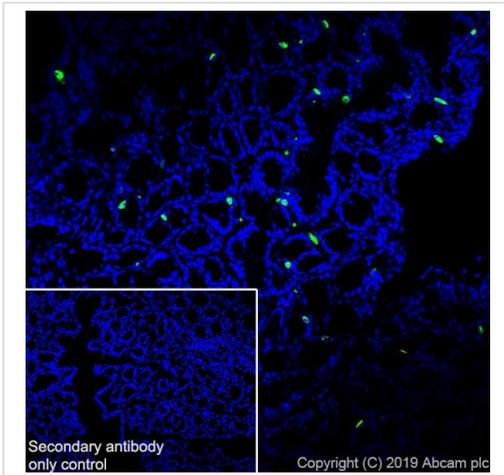
Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).



Immunocytochemistry/ Immunofluorescence - Anti-Chromogranin A antibody [EPR22537-248] (ab254322)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized PC-12 (rat adrenal gland pheochromocytoma cell line) cells labeling Chromogranin A with ab254322 at 1/100 dilution, followed by a Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous and cytoplasmic staining in PC-12 cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594) (ab195889) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution.



Frozen section of 4% PFA-fixed, 0.2% Triton X-100 permeabilized mouse colon tissue labeling Chromogranin A with ab254322 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077), at 1/1000 dilution (green). Positive staining on enteroendocrine cells of mouse colon (PMID: 27287799). is observed. The nuclear counter stain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077), at 1/1000 dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

Immunohistochemistry (Frozen sections) - Anti-Chromogranin A antibody [EPR22537-248] (ab254322)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-Chromogranin A antibody [EPR22537-248] (ab254322)

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