abcam

Product datasheet

Anti-Ret antibody [EPR2871] ab134100

リコンビナント RabMAb

8 Abreviews 47 References 画像数 16

製品の概要

製品名	Anti-Ret antibody [EPR2871]
製品の詳細	Rabbit monoclonal [EPR2871] to Ret
由来種	Rabbit
アプリケーション	**適用あり:** ELISA, WB, IP, IHC-P, ICC/IF **適用なし:** Flow Cyt
種交差性	**交差種:** Mouse, Rat, Human
免疫原	Synthetic peptide within Human Ret aa 1100 to the C-terminus (C terminal). The exact sequence is proprietary. Database link: **P07949** (Peptide available as **ab219199**)
ポジティブ・コントロール	WB: Neuro-2a, SH-SY5Y and TT cell lysates and mouse and rat brain tissue lysates. IHC-P: Human thyroid gland carcinoma, gastric carcinoma and colon tissues; Mouse colon tissue; Human medullary thyroid carcinoma (MTC) samples from GTCAC haplotype carriers & non-carriers. ICC/IF: Neuro-2a and TT cells. IP: Neuro-2a cell lysate.
特記事項	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
バッファー	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, 59% PBS

精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR2871
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab134100の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ELISA	★★★★★ (2)	Use a concentration of 0.5 µg/ml.
WB	★★★☆☆ (1)	1/1000 - 1/10000. Predicted molecular weight: 124 kDa.
IP		1/10 - 1/100.
IHC-P	★★★★☆ (1)	1/50. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**. **For unpurified use at 1/50 - 1/500.**
ICC/IF	★★★★☆ (2)	1/50 - 1/100.

追加情報 Is unsuitable for Flow Cyt.

ターゲット情報

機能 Probable receptor with tyrosine-protein kinase activity; important for development.

関連疾患 Defects in RET may be a cause of colorectal cancer (CRC) [MIM:114500].
Defects in RET are a cause of Hirschsprung disease (HSCR) [MIM:142623]. HSCR is a genetic disorder of neural crest development characterized by the absence of intramural ganglion cells in the hindgut, often resulting in intestinal obstruction. Occasionally, MEN2A or FMTC occur in association with HSCR.
Defects in RET are the cause of medullary thyroid carcinoma (MTC) [MIM:155240]. MTC is a rare tumor derived from the C cells of the thyroid. Three hereditary forms are known, that are transmitted in an autosomal dominant fashion: (a) multiple neoplasia type 2A (MEN2A), (b) multiple neoplasia type IIB (MEN2B) and (c) familial MTC (FMTC), which occurs in 25-30% of MTC cases and where MTC is the only clinical manifestation.
Defects in RET are the cause of multiple neoplasia type 2B (MEN2B) [MIM:162300]. MEN2B is an uncommon inherited cancer syndrome characterized by predisposition to MTC and phaeochromocytoma which is associated with marfanoid habitus, mucosal neuromas, skeletal and ophtalmic abnormalities, and ganglioneuromas of the intestine tract. Then the disease progresses rapidly with the development of metastatic MTC and a pheochromocytome in 50% of cases.
Defects in RET are a cause of susceptibility to pheochromocytoma (PCC) [MIM:171300]. A catecholamine-producing tumor of chromaffin tissue of the adrenal medulla or sympathetic

paraganglia. The cardinal symptom, reflecting the increased secretion of epinephrine and norepinephrine, is hypertension, which may be persistent or intermittent.
Defects in RET are the cause of multiple neoplasia type 2A (MEN2A) [MIM:171400]; also known as multiple neoplasia type 2 (MEN2). MEN2A is the most frequent form of medullary thyroid cancer (MTC). It is an inherited cancer syndrome characterized by MTC, phaeochromocytoma and/or hyperparathyroidism.
Defects in RET are a cause of thyroid papillary carcinoma (TPC) [MIM:188550]. TPC is a common tumor of the thyroid that typically arises as an irregular, solid or cystic mass from otherwise normal thyroid tissue. Papillary carcinomas are malignant neoplasm characterized by the formation of numerous, irregular, finger-like projections of fibrous stroma that is covered with a surface layer of neoplastic epithelial cells. Note=Chromosomal aberrations involving RET are found in thyroid papillary carcinomas. Inversion inv(10)(q11.2;q21) generates the RET/CCDC6 (PTC1) oncogene; inversion inv(10)(q11.2;q11.2) generates the RET/NCOA4 (PTC3) oncogene; translocation t(10;14)(q11;q32) with GOLGA5 generates the RET/GOLGA5 (PTC5) oncogene; translocation t(8;10)(p21.3;q11.2) with PCM1 generates the PCM1/RET fusion; translocation t(6;10)(p21.3;q11.2) with RFP generates the Delta RFP/RET oncogene; translocation t(1;10)(p13;q11) with TRIM33 generates the TRIM33/RET (PTC7) oncogene; translocation t(7;10)(q32;q11) with TRIM24/TIF1 generates the TRIM24/RET (PTC6) oncogene. The PTC5 oncogene has been found in 2 cases of PACT in children exposed to radioactive fallout after Chernobyl. A chromosomal aberration involving TRIM27/RFP is found in thyroid papillary carcinomas. Translocation t(6;10)(p21.3;q11.2) with RET. The translocation generates TRIM27/RET and delta TRIM27/RET oncogenes.
Defects in RET are a cause of renal adysplasia (RADYS) [MIM:191830]; also known as renal agenesis or renal aplasia. Renal agenesis refers to the absence of one (unilateral) or both (bilateral) kidneys at birth. Bilateral renal agenesis belongs to a group of perinatally lethal renal diseases, including severe bilateral renal dysplasia, unilateral renal agenesis with contralateral dysplasia and severe obstructive uropathy.
Defects in RET are a cause of congenital central hypoventilation syndrome (CCHS) [MIM:209880]; also known as congenital failure of autonomic control or Ondine curse. CCHS is a rare disorder characterized by abnormal control of respiration in the absence of neuromuscular or lung disease, or an identifiable brain stem lesion. A deficiency in autonomic control of respiration results in inadequate or negligible ventilatory and arousal responses to hypercapnia and hypoxemia.

配列類似性

Belongs to the protein kinase superfamily. Tyr protein kinase family.
Contains 1 cadherin domain.
Contains 1 protein kinase domain.

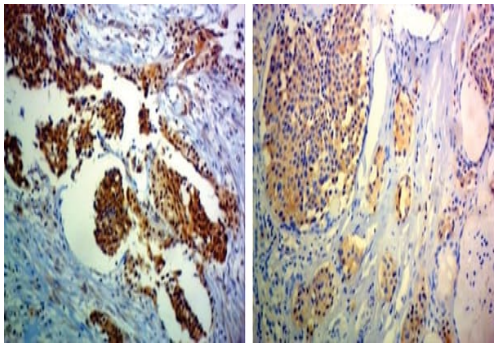
翻訳後修飾

Autophosphorylated on C-terminal tyrosine residues upon ligand stimulation. Dephosphorylated by PTPRJ on Tyr-905, Tyr-1015 and Tyr-1062.

細胞内局在

Membrane.

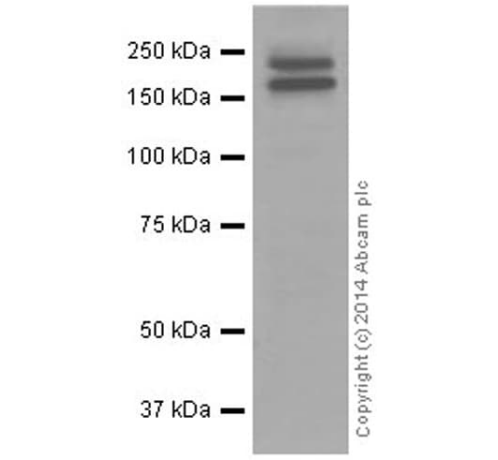
画像



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ret antibody [EPR2871] (ab134100)

Immunostaining of the Ret proto-oncogene in human Medullary thyroid carcinoma (MTC) samples from GTCAC haplotype carriers & non-carriers.

Two representative slices of Ret Immunostaining in a sample carrier S836S/3'UTR (GTCAC haplotype) (left) and non-carrier of this haplotype (right)



Western blot - Anti-Ret antibody [EPR2871] (ab134100)

Anti-Ret antibody [EPR2871] (ab134100) at 1/1000 dilution (purified) + TT (human thyroid carcinoma cell line) whole cell lysate at 10 µg

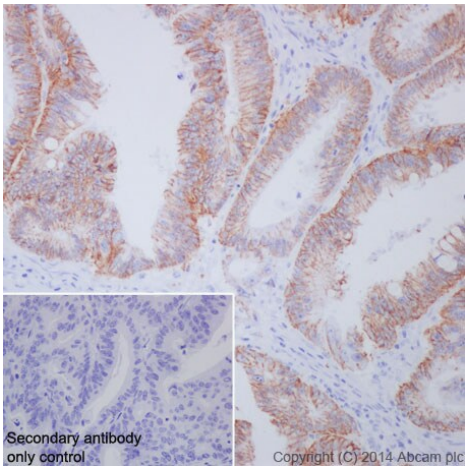
Secondary

Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 124 kDa

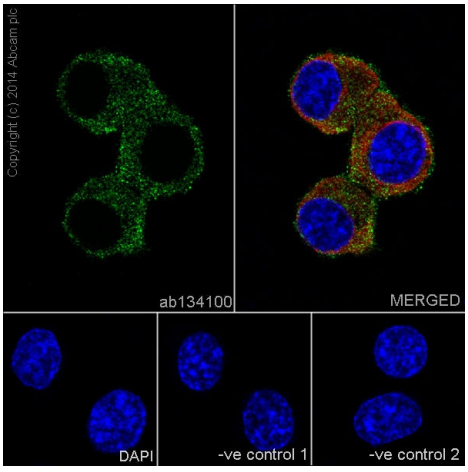
Observed band size: 155,175 kDa

Blocking and dilution buffer: 5% NFDM/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ret antibody [EPR2871] (ab134100)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human gastric carcinoma tissue labelling Ret with **purified** ab134100 at a dilution of 1/50. Heat mediated antigen retrieval was performed using EDTA buffer pH 9. **ab97051**, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

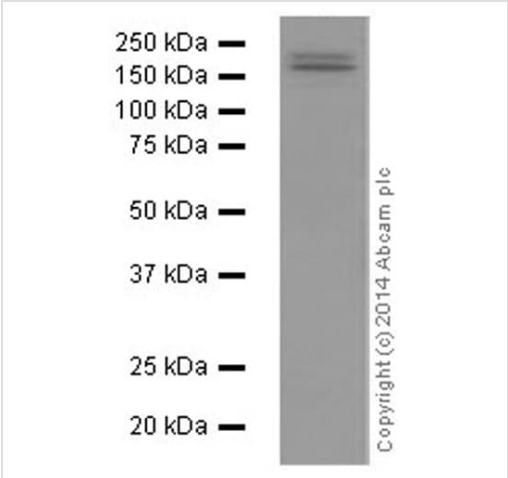


Immunocytochemistry/ Immunofluorescence - Anti-Ret antibody [EPR2871] (ab134100)

Immunocytochemistry/Immunofluorescence analysis of Neuro-2a cells labelling Ret with purified ab134100 at a dilution of 1/100. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. **ab7291**, a mouse anti-tubulin (1/1000) and **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000) were also used.

Control 1: primary antibody (1/100) and secondary antibody, **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000).

Control 2: **ab7291** (1/1000) and secondary antibody, **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000).



Western blot - Anti-Ret antibody [EPR2871] (ab134100)

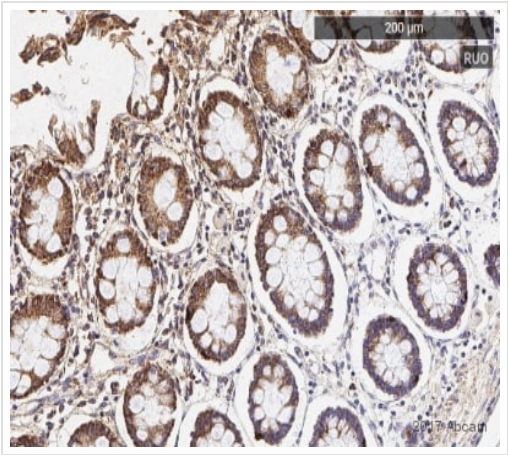
Anti-Ret antibody [EPR2871] (ab134100) at 1/5000 dilution (purified) + SH-SY5Y (human neuroblastoma cell line from bone marrow) whole cell lysate at 10 µg

Secondary

Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 124 kDa
Observed band size: 155,175 kDa

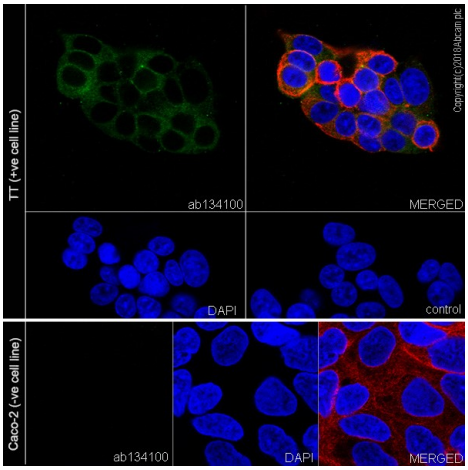
Blocking and dilution buffer: 5% NFDM/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ret antibody [EPR2871] (ab134100)

This image is courtesy of an anonymous Abreview.

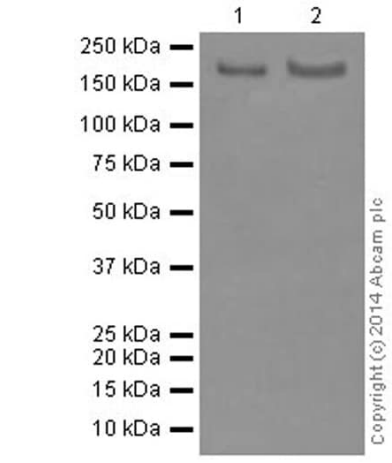
Formaldehyde-fixed, paraffin-embedded human colon tissue stained for Ret using ab134100 at 1/80 dilution in immunohistochemical analysis, followed by Goat anti-Rabbit IgG (HRP antibody.



Immunocytochemistry/ Immunofluorescence - Anti-Ret antibody [EPR2871] (ab134100)

Immunocytochemistry/Immunofluorescence analysis of TT (human thyroid carcinoma epithelial cell) cells labelling Ret with purified ab134100 at a dilution of 1/200. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (1/200) was used as a counter stain.

-ve control: Caco-2 (PMID: 10811228) cells stained with primary antibody (1/100) and secondary antibody, **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000).



Western blot - Anti-Ret antibody [EPR2871] (ab134100)

All lanes : Anti-Ret antibody [EPR2871] (ab134100) at 1/1000 dilution (purified)

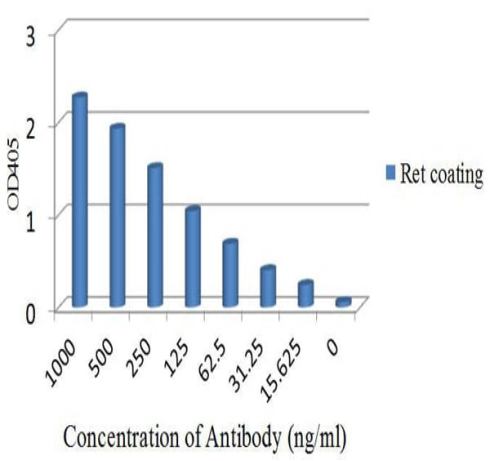
Lane 1 : Mouse brain tissue
Lane 2 : Rat brain tissue

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

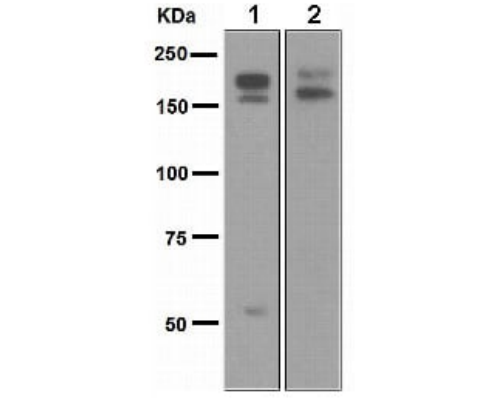
Predicted band size: 124 kDa
Observed band size: 155,175 kDa

Blocking and dilution buffer: 5% NFDM/TBST



ELISA - Anti-Ret antibody [EPR2871] (ab134100)

ELISA antigen dose-response curve using purified ab134100 at 0-1000 ng/ml. Antigen concentration of 1000 ng/mL. An Alkaline-Phosphatase-conjugated goat anti-rabbit IgG (H+L) (1/2500) was used as the secondary antibody.



Western blot - Anti-Ret antibody [EPR2871] (ab134100)

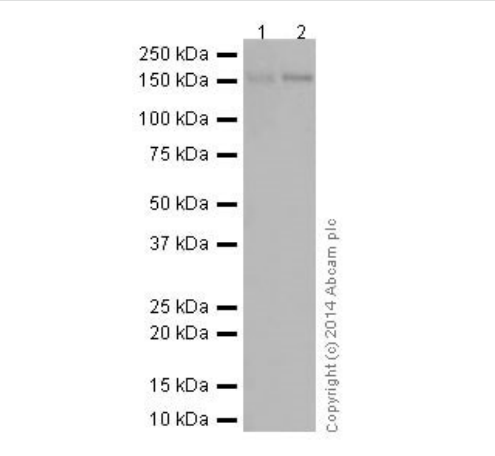
All lanes : Anti-Ret antibody [EPR2871] (ab134100) at 1/10000 dilution (unpurified)

Lane 1 : Neuro-2a (mouse neuroblastoma cell line) cell lysate
Lane 2 : TT (human thyroid carcinoma cell line) cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : HRP-conjugated goat anti-rabbit IgG at 1/2000 dilution

Predicted band size: 124 kDa



Western blot - Anti-Ret antibody [EPR2871] (ab134100)

All lanes : Anti-Ret antibody [EPR2871] (ab134100) at 1/10000 dilution (unpurified)

Lane 1 : Mouse brain tissue lysate
Lane 2 : Rat brain tissue lysate

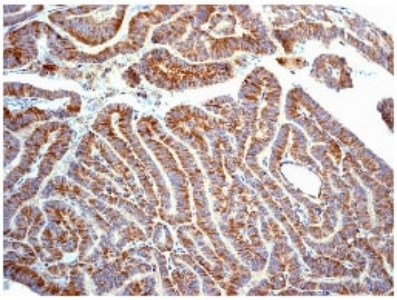
Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Peroxidase-conjugated goat anti-rabbit IgG, (H+L) at 1/1000 dilution

Predicted band size: 124 kDa
Observed band size: 155 kDa

Exposure time: 3 minutes

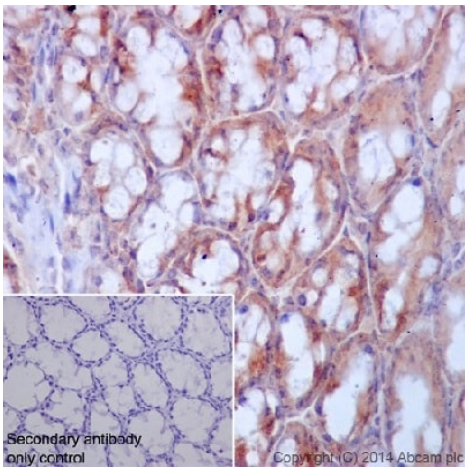
Blocking and Diluting buffer and concentration: 5% NFDM/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ret antibody [EPR2871] (ab134100)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human thyroid gland carcinoma tissue labelling Ret with **unpurified** ab134100 at a dilution of 1/250.

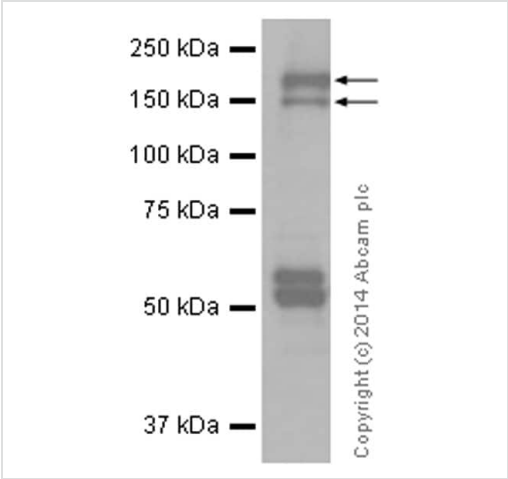
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ret antibody [EPR2871] (ab134100)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse colon tissue labelling Ret with **unpurified** ab134100 at a dilution of 1/50 followed by HRP-conjugated goat anti-rabbit IgG (H&L) (**ab97051**, 1/500). Counter stained with hematoxylin.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Western blot - Anti-Ret antibody [EPR2871] (ab134100)

Anti-Ret antibody [EPR2871] (ab134100) at 1/10000 dilution (purified) + Neuro-2a (mouse neuroblastoma cell line) whole cell lysate at 10 µg

Secondary

Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/2000 dilution

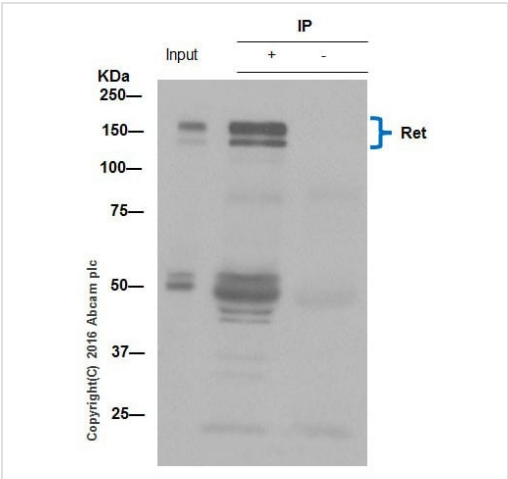
Predicted band size: 124 kDa

Observed band size: 155,175 kDa

Exposure time: 3 minutes

Blocking and dilution buffer: 5% NFDM /TBST.

We are unsure about the nature of 40kDa to 60kDa bands, they might be the intracellular fragments of Ret.



Immunoprecipitation - Anti-Ret antibody [EPR2871] (ab134100)

ab134100 (purified) at 1/40 immunoprecipitating Ret in Neuro-2a mMouse neuroblastoma cell line) whole cell lysate.

Lane 1 (input): Neuro-2a whole cell lysate (10µg)

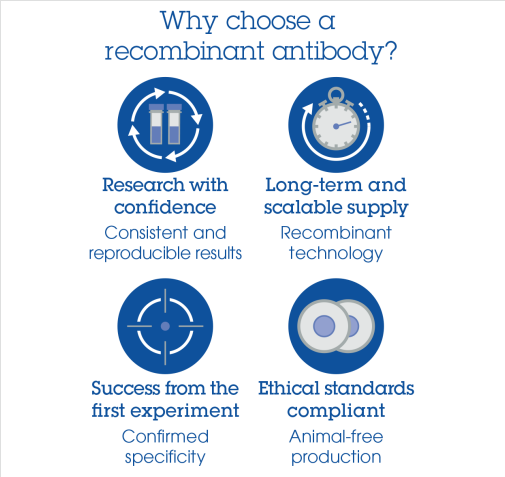
Lane 2 (+): ab134100 + Neuro-2a whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab134100 in Neuro-2a whole cell lysate.

For western blotting, ab134100 was used at 1/1000 followed by a HRP-conjugated anti-rabbit IgG (specific to the non-reduced form of IgG, 1/1500).

Blocking buffer and dilution concentration: 5% NFDM/TBST.

We are unsure about the nature of 40kDa to 60kDa bands, they might be the intracellular fragments of Ret.



Anti-Ret antibody [EPR2871] (ab134100)

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