

Product datasheet

Anti-EGF antibody [EPR21926] ab218831

Recombinant RabMAb

6 Images

Overview

Product name	Anti-EGF antibody [EPR21926]
Description	Rabbit monoclonal [EPR21926] to EGF
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, IHC-Fr, IP
Species reactivity	Reacts with: Rat
Immunogen	Recombinant fragment within Rat EGF aa 950-1050. The exact sequence is proprietary. Database link: P07522
Positive control	WB: Rat EGF active protein (aa974-1026), rat salivary gland tissue lysate and rat urine. IHC-P: Rat kidney tissue. IHC-Fr: Rat kidney tissue. IP: Rat salivary gland tissue lysate.
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> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise[™] guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own</p>

labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

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: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR21926
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab218831** 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
WB		1/1000. Predicted molecular weight: 133 kDa.
IHC-P		1/10000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IHC-Fr		1/500. Perform heat-mediated antigen retrieval by sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).
IP		1/30.

Target

Function	EGF stimulates the growth of various epidermal and epithelial tissues in vivo and in vitro and of some fibroblasts in cell culture. Magnesiotropic hormone that stimulates magnesium reabsorption in the renal distal convoluted tubule via engagement of EGFR and activation of the magnesium channel TRPM6. Can induce neurite outgrowth in motoneurons of the pond snail <i>Lymnaea stagnalis</i> in vitro (PubMed:10964941).
Tissue specificity	Expressed in kidney, salivary gland, cerebrum and prostate.
Involvement in disease	Hypomagnesemia 4

Sequence similarities

Contains 9 EGF-like domains.
Contains 9 LDL-receptor class B repeats.

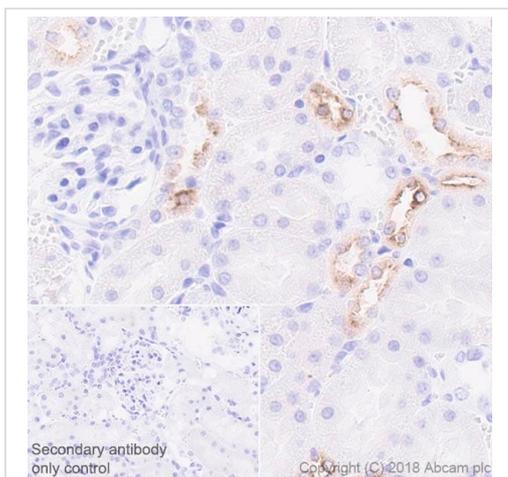
Post-translational modifications

O-glycosylated with core 1-like and core 2-like glycans. It is uncertain if Ser-954 or Thr-955 is O-glycosylated. The modification here shows glycan heterogeneity: HexHexNAc (major) and Hex2HexNAc2 (minor).

Cellular localization

Membrane.

Images

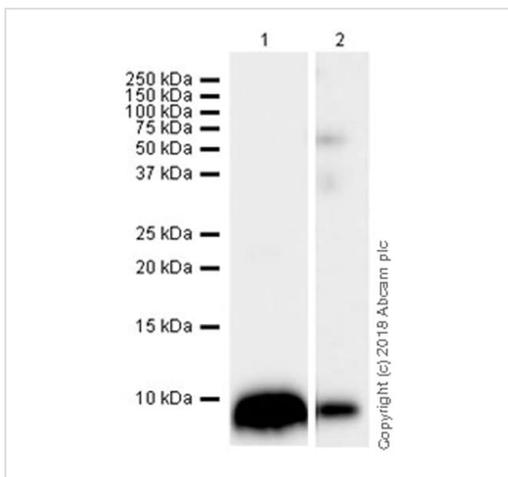


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EGF antibody [EPR21926] (ab218831)

Immunohistochemical analysis of paraffin-embedded rat kidney tissue labeling EGF with ab218831 at 1/10,000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Cytoplasmic staining in distal convoluted tubules of rat kidney (PMID 1930151) is observed. Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Perform heat-mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).



Western blot - Anti-EGF antibody [EPR21926] (ab218831)

All lanes : Anti-EGF antibody [EPR21926] (ab218831) at 1/5000 dilution

Lane 1 : Rat salivary gland tissue lysate

Lane 2 : Rat urine

Lysates/proteins at 20 µg per lane.

Secondary

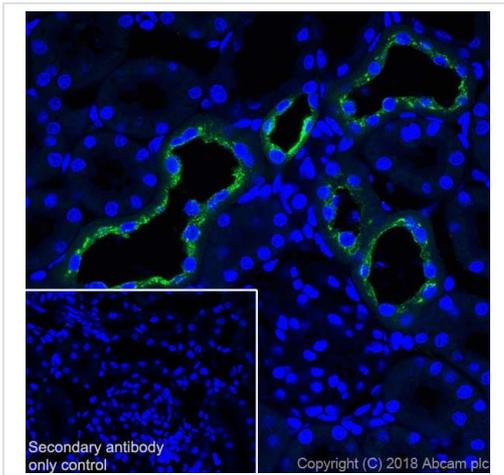
All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 133 kDa

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

Exposure: Lane 1: 3 minutes; Lane 2: 75 seconds

The molecular mass observed is consistent with what has been described in the literature (PMID:2268351).

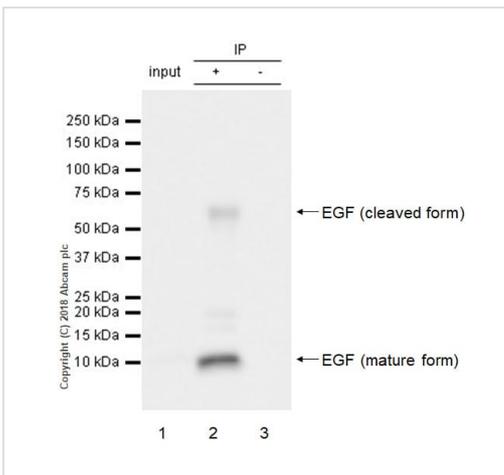


Immunohistochemistry (Frozen sections) - Anti-EGF antibody [EPR21926] (ab218831)

Immunohistochemical analysis of frozen rat kidney tissue labeling EGF with ab218831 at 1/500 dilution, followed by AlexaFluor[®]488 Goat anti-Rabbit secondary (ab150077) at 1/1000 dilution. Positive staining on distal convoluted tubule of rat kidney (PMID: 23143303) is observed. Tissue was fixed in 4% PFA and permeabilized using 0.2% Triton X-100.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is AlexaFluor[®]488 Goat anti-Rabbit secondary (ab150077) at 1/1000 dilution.

Perform heat-mediated antigen retrieval by sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).



Immunoprecipitation - Anti-EGF antibody [EPR21926] (ab218831)

EGF was immunoprecipitated from 0.35 mg of rat salivary gland lysate with ab218831 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab218831 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/5000 dilution.

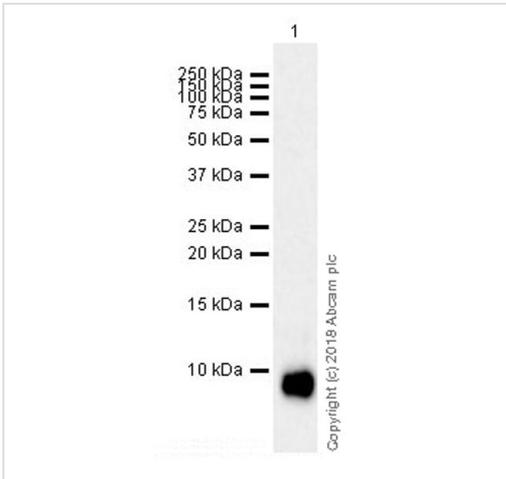
Lane 1: Rat salivary gland tissue 10 µg (Input).

Lane 2: ab218831 IP in rat salivary gland lysate.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab218831 in rat salivary gland lysate.

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

Exposure time: 3 seconds.



Western blot - Anti-EGF antibody [EPR21926] (ab218831)

Anti-EGF antibody [EPR21926] (ab218831) at 1/1000 dilution + Rat EGF active protein (aa974-1026), 20ng

Secondary

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

Predicted band size: 133 kDa

Exposure time: 3 minutes

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

The molecular mass observed is consistent with what has been described in the literature (PMID:2268351).

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-EGF antibody [EPR21926] (ab218831)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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