abcam

Product datasheet

Anti-LYRIC/AEG1 antibody [EPR20797] ab227981

Recombinant RabMAb

13 References 10 Images

Overview

Product name	Anti-LYRIC/AEG1 antibody [EPR20797]
Description	Rabbit monoclonal [EPR20797] to LYRIC/AEG1
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, ICC/IF, IP, IHC-P
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: MCF7, T47D, HeLa, PC-3 and PC-12 whole cell lysates; Human lung cancer lysate. IHC-P: Human astrocytoma and ovarian cancer tissues; Mouse and rat cerebrum tissues. ICC/IF: HeLa and PC-3 cells. Flow Cyt (intra): HeLa cells. IP: HeLa whole cell lysate.
General notes	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**.

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: 0.05% BSA, 40% Glycerol (glycerin, glycerine), PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20797

Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab227981 in the following tested applications.

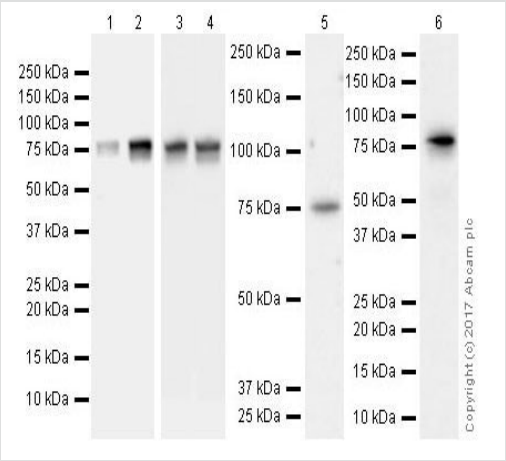
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/500.
WB		1/1000. Detects a band of approximately 75, 80 kDa (predicted molecular weight: 64 kDa).
ICC/IF		1/100.
IP		1/30.
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

Function	Downregulates SLC1A2/EAAT2 promoter activity when expressed ectopically. Activates the nuclear factor kappa-B (NF-kappa-B) transcription factor. Promotes anchorage-independent growth of immortalized melanocytes and astrocytes which is a key component in tumor cell expansion. Promotes lung metastasis and also has an effect on bone and brain metastasis, possibly by enhancing the seeding of tumor cells to the target organ endothelium. Induces chemoresistance.
Tissue specificity	Widely expressed with highest levels in muscle-dominating organs such as skeletal muscle, heart, tongue and small intestine and in endocrine glands such as thyroid and adrenal gland. Overexpressed in various cancers including breast, brain, prostate, melanoma and glioblastoma multiforme.
Cellular localization	Endoplasmic reticulum membrane. Nucleus membrane. Cell junction > tight junction. Nucleus > nucleolus. Cytoplasm > perinuclear region. In epithelial cells, recruited to tight junctions (TJ) during the maturation of the TJ complexes. A nucleolar staining may be due to nuclear targeting of an isoform lacking the transmembrane domain (By similarity). TNF-alpha causes translocation from the cytoplasm to the nucleus.

Images



Western blot - Anti-LYRIC/AEG1 antibody [EPR20797] (ab227981)

All lanes : Anti-LYRIC/AEG1 antibody [EPR20797] (ab227981) at 1/1000 dilution

Lane 1 : MCF7 (human breast adenocarcinoma cell line) whole cell lysate at 20 µg
Lane 2 : T-47D (human ductal breast epithelial tumor cell line) whole cell lysate at 20 µg
Lane 3 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 20 µg
Lane 4 : PC-3 (human prostate adenocarcinoma cell line) whole cell lysate at 20 µg
Lane 5 : Human lung cancer lysate at 10 µg
Lane 6 : PC-12 (rat adrenal gland pheochromocytoma cell line) whole cell lysate at 10 µg

Secondary
Lanes 1-4 & 6 : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution
Lane 5 : VeriBlot for IP Detection Reagent (HRP) (**ab131366**) at 1/4000 dilution

Predicted band size: 64 kDa
Observed band size: 75,80 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure times.

Lanes 1, 2 & 5: 3 minutes.

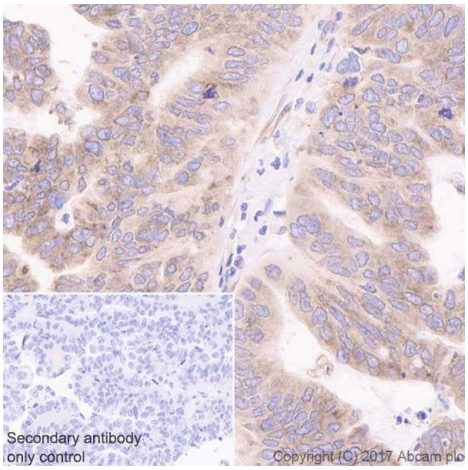
Lanes 3 & 4: 15 seconds.

Lane 6: 58 seconds.

The blot was developed on a BIO-RAD® ChemiDoc™ MP instrument.

This antibody detected LYRIC/AEG1 in rat PC-12 cells only, not in other rat tissues or cell lines tested.

The protein migrates as a 75/80kDa doublet, as has been observed in the literature (PMID: 23835593).

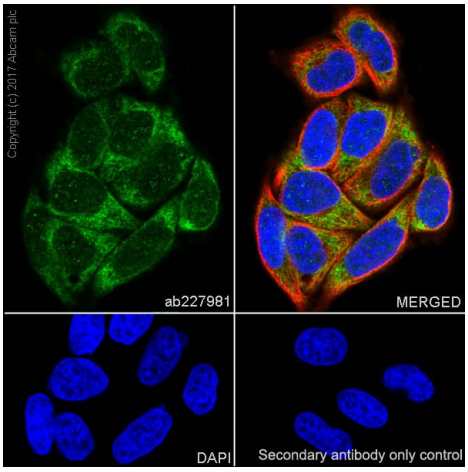


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LYRIC/AEG1 antibody [EPR20797] (ab227981)

Immunohistochemical analysis of paraffin-embedded human ovarian cancer tissue labeling LYRIC/AEG1 with ab227981 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining in human ovarian cancer tissue (PMID: 27143933) is observed. Counter stained with hematoxylin.

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

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

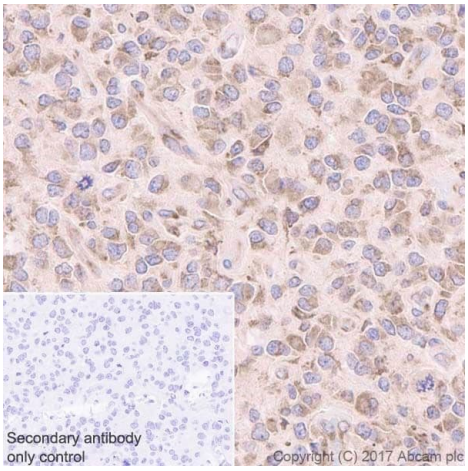


Immunocytochemistry/ Immunofluorescence - Anti-LYRIC/AEG1 antibody [EPR20797] (ab227981)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (human epithelial cell line from cervix adenocarcinoma) cells labeling LYRIC/AEG1 with ab227981 at 1/100 dilution followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic and weakly nuclear staining in HeLa cell line (PMID: 21750868).

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) (red) at 1/200 dilution.

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

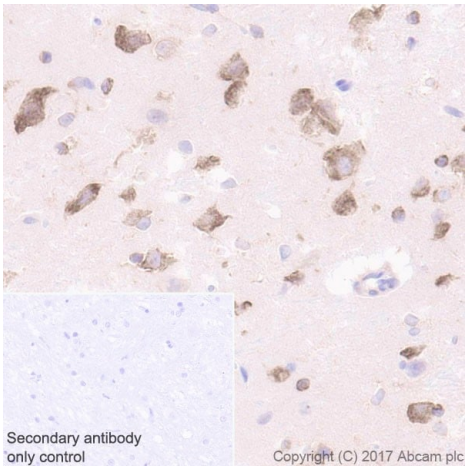


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LYRIC/AEG1 antibody [EPR20797] (ab227981)

Immunohistochemical analysis of paraffin-embedded human astrocytoma tissue labeling LYRIC/AEG1 with ab227981 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining in human astrocytoma tissue (PMID: 25197376) is observed. Counter stained with hematoxylin.

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

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

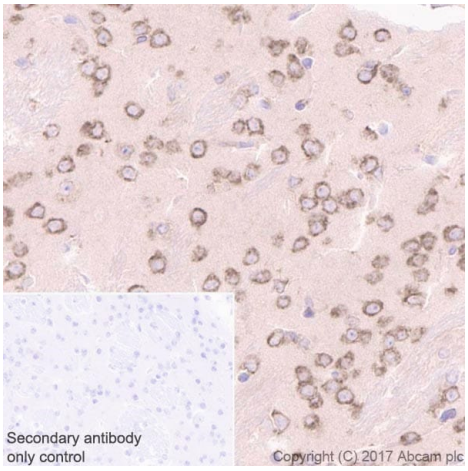


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LYRIC/AEG1 antibody [EPR20797] (ab227981)

Immunohistochemical analysis of paraffin-embedded mouse cerebrum tissue labeling LYRIC/AEG1 with ab227981 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining in mouse cerebrum tissue (PMID:25197376) is observed. Counter stained with hematoxylin.

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

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

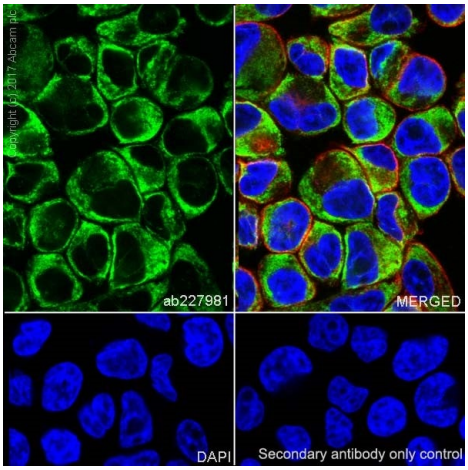


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LYRIC/AEG1 antibody [EPR20797] (ab227981)

Immunohistochemical analysis of paraffin-embedded rat cerebrum tissue labeling LYRIC/AEG1 with ab227981 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining in rat cerebrum tissue (PMID:25197376) is observed. Counter stained with hematoxylin.

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

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

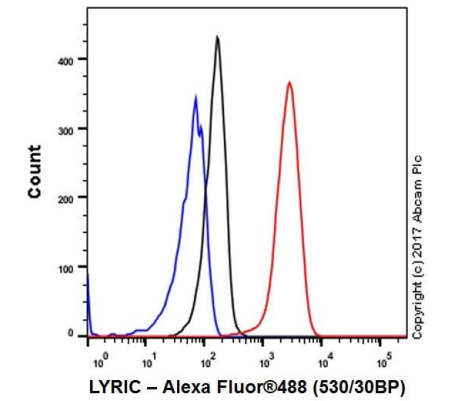


Immunocytochemistry/ Immunofluorescence - Anti-LYRIC/AEG1 antibody [EPR20797] (ab227981)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized PC-3 (human prostate adenocarcinoma cell line) cells labeling LYRIC/AEG1 with ab227981 at 1/100 dilution followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining in PC-3 cell line.

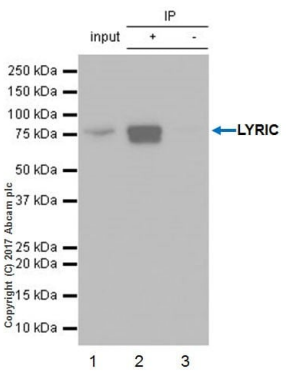
The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) (red) at 1/200 dilution.

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



Flow Cytometry (Intracellular) - Anti-LYRIC/AEG1 antibody [EPR20797] (ab227981)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized HeLa (human epithelial cell line from cervix adenocarcinoma) cell line labeling LYRIC/AEG1 with ab227981 at 1/500 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (black) and an unlabeled 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.



Immunoprecipitation - Anti-LYRIC/AEG1 antibody [EPR20797] (ab227981)

LYRIC/AEG1 was immunoprecipitated from 0.35 mg of HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate with ab227981 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab227981 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10000 dilution.

Lane 1: HeLa whole cell lysate 10 µg (Input).

Lane 2: ab227981 IP in HeLa whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab227981 in HeLa whole cell lysate.

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

Exposure time: 1 second.

The protein migrates as a 75/80kDa doublet, as has been observed in the literature (PMID: 23835593).

Anti-LYRIC/AEG1 antibody [EPR20797] (ab227981)

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