abcam

Product datasheet

Anti-Firefly Luciferase antibody [EPR17789] - N-terminal ab185923



5 References 6 Images

Overview

Product name Anti-Firefly Luciferase antibody [EPR17789] - N-terminal

Description Rabbit monoclonal [EPR17789] to Firefly Luciferase - N-terminal

Host species Rabbit

Tested applications Suitable for: ICC/IF, WB, Flow Cyt

Species reactivity Reacts with: Firefly

Does not react with: Mouse, Rat

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Firefly Luciferase transfected HEK-293 whole cell lysate. ICC/IF: Firefly Luciferase

transfected HEK-293T cells.

General notesThis 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: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal

1

Clone number

EPR17789

Isotype

lgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab185923 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
ICC/IF		1/500.
WB		1/2000. Detects a band of approximately 61 kDa (predicted molecular weight: 61 kDa).
Flow Cyt		Use at an assay dependent concentration.

Target

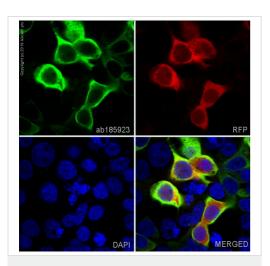
Relevance

Luciferase from the firefly has become one of the more widely used reporter proteins for the study of gene expression. Luciferase catalyzes a bioluminescent reaction which requires the substrate luciferin as well as Mg2+ and ATP. Mixing these reagents with the cell extract containing luciferase, results in a flash of light that decays rapidly. This light can be detected by a luminometer. The total light emission is proportional to the luciferase activity of the sample.

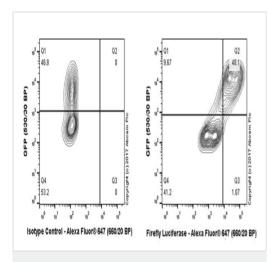
Cellular localization

Peroxisome

Images

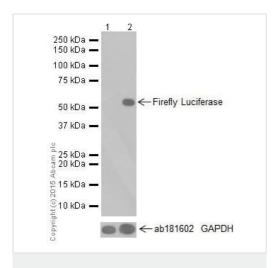


Immunocytochemistry/ Immunofluorescence - Anti-Firefly Luciferase antibody [EPR17789] - N-terminal (ab185923) Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HEK-293T (Human epithelial cells from embryonic kidney) cells transfected with Empty vector or Firefly Luciferase, labeling Firefly Luciferase with ab185923 at 1/500 dilution, followed by Goat anti-rabbit lgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/500 dilution (green). Nuclear staining on HEK293T cells transfected with Firefly Luciferase is observed. The nuclear counter stain is DAPI (blue).



Flow Cytometry - Anti-Firefly Luciferase antibody [EPR17789] - N-terminal (ab185923)

Flow Cytometry analysis of 293T (Human epithelial cell line from embryonic kidney) transfected with GFP tagged Firefly Luciferase cells labeling Firefly Luciferase with purified ab185923 at 1/200 dilution (10ug/ml, Right panel). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit lgG (Alexa Fluor[®] 647)(1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal lgG (Left panel) was used as the isotype control.



Western blot - Anti-Firefly Luciferase antibody [EPR17789] - N-terminal (ab185923)

All lanes : Anti-Firefly Luciferase antibody [EPR17789] - N-terminal (ab185923) at 1/2000 dilution

Lane 1 : Empty vector (vector control) transfected HEK293 (human embryonic kidney) whole cell lysate

Lane 2 : Firefly Luciferase transfected HEK293 (human embryonic kidney) whole cell lysate

Lysates/proteins at 10 µg per lane.

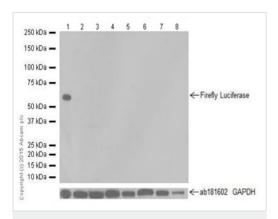
Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Predicted band size: 61 kDa
Observed band size: 61 kDa

Exposure time: 30 seconds

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Firefly Luciferase antibody [EPR17789] - N-terminal (ab185923)

All lanes : Anti-Firefly Luciferase antibody [EPR17789] - N-terminal (ab185923) at 1/1000 dilution

Lane 1 : Firefly Luciferase transfected HEK293 (human embryonic kidney) whole cell lysate at 10 μg

Lane 2 : HeLa (human cervix adenocarcinoma) whole cell lysate at 20 μg

Lane 3 : MCF-7 (human breast carcinoma) whole cell lysate at 20 μg

Lane 4 : Jurkat (human acute T cell leukemia) whole cell lysate at 20 µg

Lane 5 : SH-SY5Y (human neuroblastoma) whole cell lysate at 20 ug

Lane 6: Human fetal heart lysate at 10 μg **Lane 7**: Human fetal kidney lysate at 10 μg **Lane 8**: Human fetal spleen lysate at 10 μg

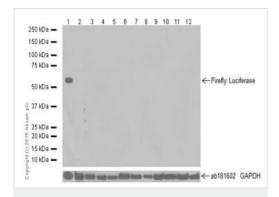
Secondary

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

Predicted band size: 61 kDa **Observed band size:** 61 kDa

Exposure time: 3 minutes

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Firefly Luciferase antibody [EPR17789] - N-terminal (ab185923) **All lanes :** Anti-Firefly Luciferase antibody [EPR17789] - N-terminal (ab185923) at 1/1000 dilution

Lane 1 : Firefly Luciferase transfected HEK293 (human embryonic

kidney) whole cell lysate

Lane 2 : Mouse brain lysate

Lane 3: Mouse heart lysate

Lane 4: Mouse kidney lysate

Lane 5: Mouse spleen lysate

Lane 6: Rat brain lysate

Lane 7: Rat kidney lysate

Lane 8: Rat spleen lysate

Lane 9: C6 (rat glioma) whole cell lysate lysate

Lane 10: Raw264.7 (mouse abelson murine leukemia virus-

induced tumor) whole cell lysate

Lane 11: PC-12 (rat adrenal gland pheochromocytoma) whole cell

lysate

Lane 12: NIH/3T3 (mouse embryo) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Predicted band size: 61 kDa **Observed band size:** 61 kDa

Exposure time: 3 minutes

Blocking and dilution buffer: 5% NFDM/TBST.



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