

Product datasheet

Anti-Firefly Luciferase antibody ab21176

★★★★★ 16 Abreviews 29 References 6 Images

Overview

Product name	Anti-Firefly Luciferase antibody
Description	Rabbit polyclonal to Firefly Luciferase
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, IHC-Fr, WB
Species reactivity	Reacts with: Firefly
Immunogen	Full length native protein (purified) (Firefly (Photinus pyralis)).

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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 15mM Sodium Azide Constituents: 0.01M PBS, pH 7.4
Purity	IgG fraction
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab21176** 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	★★★★★	Use a concentration of 10 µg/ml.
IHC-Fr	★★★★★	1/1000. PubMed: 18219389
WB	★★★★☆	1/1000 - 1/2000.

Target

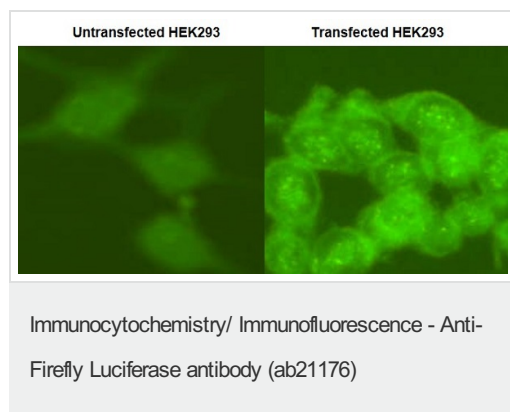
Relevance

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 Mg^{2+} 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.

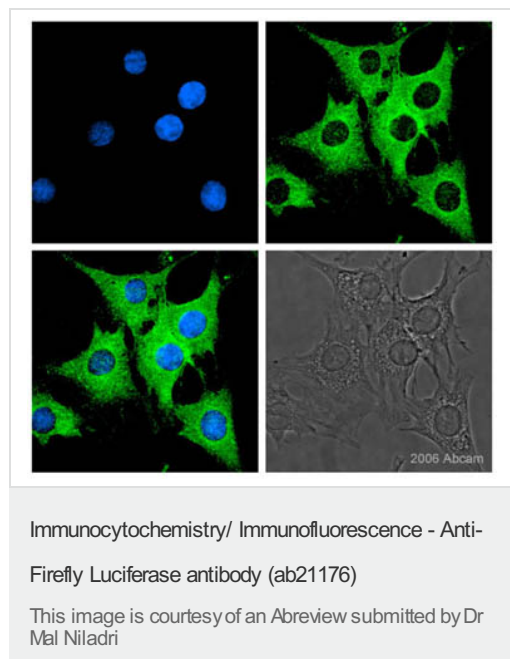
Cellular localization

Peroxisome

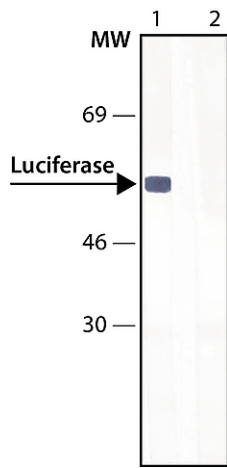
Images



ab21176 at 10 - 20 $\mu\text{g}/\text{mL}$ staining Luciferase in transfected HEK293 cells by ICC/IF. The cells were fixed with methanol and acetone. A FITC conjugated Anti-Rabbit IgG was used as the secondary antibody.



ab21176 at 1/200 dilution staining engineered adult rat stromal stem cells by ICC/IF. The cells were paraformaldehyde (2%) fixed and Triton X-100 (0.1%) was used for cell permeabilization (15 min incubation time). The cells were incubated with the antibody overnight at 4C. The image shows Luciferase (green-upper right panel), counterstained cell nuclei (DAPI-blue-upper left panel), overlay (lower left panel) and a phase contrast image (lower right panel). The image was taken with a confocal laser scanning microscope equipped with an additional laser differential Interference Contrast (DIC) mode.



Western blot - Anti-Firefly Luciferase antibody (ab21176)

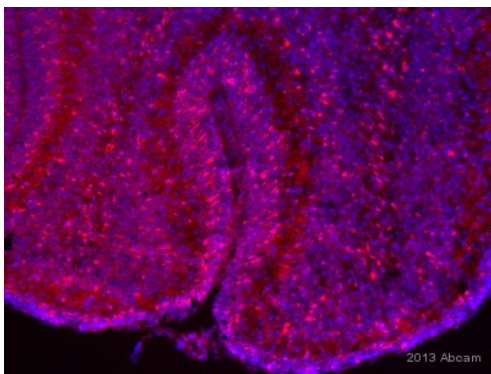
All lanes : Anti-Firefly Luciferase antibody (ab21176) at 1/1000 dilution

Lane 1 : Lysates of HEK-293T cells overexpressing luciferase

Lane 2 : Lysates of HEK-293T cells overexpressing luciferase with Luciferase Immunizing Peptide

Secondary

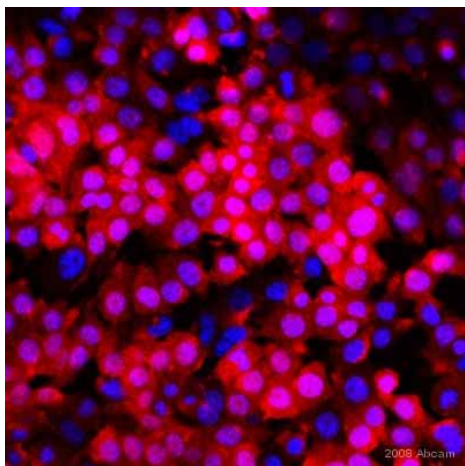
All lanes : Goat Anti-Rabbit IgG-Alkaline Phosphatase and a colorimetric substrate



Immunohistochemistry (Frozen sections) - Anti-Firefly Luciferase antibody (ab21176)

This image is courtesy of an Abreview submitted by Radhi Praba Velayutham

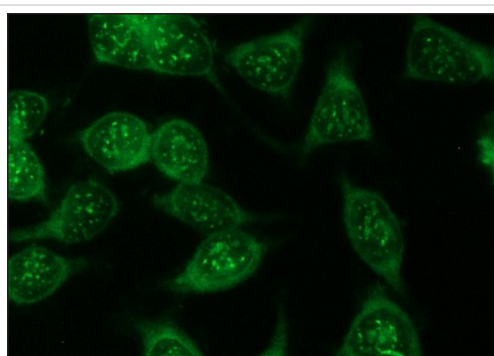
ab21176 staining Firefly Luciferase in Mouse cerebellum tissue sections by Immunohistochemistry (IHC-Fr - frozen sections). Tissue was fixed with acetone, permeabilized with PBS + 0.1% Triton X-100 (PBST) for 10 minutes and blocked with 10% serum for 1 hour at 22°C. Samples were incubated with primary antibody (1/1500 in 10% Goat serum in PBST) for 1 hour at 22°C. An Alexa Fluor® 555-conjugated Goat anti-rabbit IgG polyclonal (1/1000) was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-Firefly Luciferase antibody (ab21176)

This image is courtesy of an anonymous Abreview

ab21176 staining mouse mammary carcinoma cells by ICC/IF. Cells were PFA fixed and permeabilized in 0.1% Triton X-100 prior to blocking with a commercial blocking agent. The primary antibody was diluted 1/100 and incubated with the sample for 1 hour at 25°C. An Alexa Fluor® 555 conjugated goat anti-rabbit antibody was used as the secondary. The image shows firefly luciferase (red) in mouse tumour cells and cell nuclei counterstained with Hoechst (blue).



Immunocytochemistry/ Immunofluorescence - Anti-Firefly Luciferase antibody (ab21176)

Immunocytochemical analysis analysis of HEK-293T cells overexpressing luciferase labelling Luciferase with ab21176 at a concentration of 10µg/mL. The secondary antibody was a Goat Anti-Rabbit IgG, FITC conjugate.

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