

Product datasheet

Anti-beta Galactosidase antibody ab9361

★★★★★ 36 Abreviews 475 References 6 Images

Overview

Product name	Anti-beta Galactosidase antibody
Description	Chicken polyclonal to beta Galactosidase
Host species	Chicken
Tested applications	Suitable for: IHC-FrFI, IHC-FoFr, ICC/IF, IHC-Fr, IHC-P
Species reactivity	Reacts with: Escherichia coli
Immunogen	Full length native protein (purified). The immunogen was purified beta-galactosidase from Escherichia coli.

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. 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, along with publications, 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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.097% Sodium azide Constituent: 0.0268% PBS
Purity	Immunogen affinity purified
Purification notes	Antibodies were solid phase absorbed then immunoaffinity purified using purified beta-galactosidase immobilized on a solid phase.
Clonality	Polyclonal
Isotype	IgY

Applications

The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab9361 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
IHC-FrFI	★★★★★ (4)	Use at an assay dependent concentration.
IHC-FoFr	★★★★★ (4)	1/1000 - 1/2000.
ICC/IF	★★★★★ (9)	Use at an assay dependent concentration.
IHC-Fr	★★★★★ (9)	Use at an assay dependent concentration.
IHC-P	★★★★★ (7)	1/200 - 1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

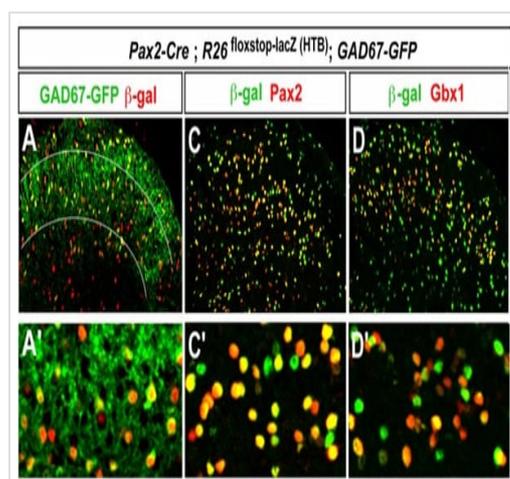
Relevance

Beta galactosidase is coded by a gene (*lac z*) in the *lac* operon of *Escherichia coli*. It is a metalloenzyme that splits lactose into glucose and galactose. It hydrolyzes terminal, non-reducing beta-D-galactose residues in beta-D-galactosides. Activation by cations seems to be substrate dependent. K⁺, Na⁺, NH₄⁺, Rb⁺, Cs⁺ and Mn⁺⁺ all activate enzyme activity based upon the substrate used.

Cellular localization

Cytoplasmic

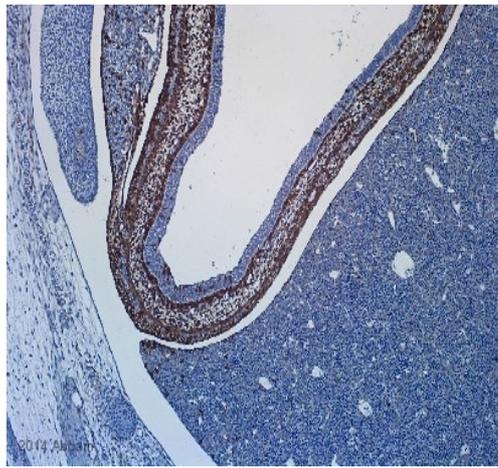
Images



Immunohistochemistry (Frozen sections) - Anti-beta Galactosidase antibody (ab9361)

Image from PLoS One. 2013; 8(11): e77928, Fig 2, doi: 10.1371/journal.pone.0077928 Reproduced under the Creative Commons license <http://creativecommons.org/licenses/by/4.0/>

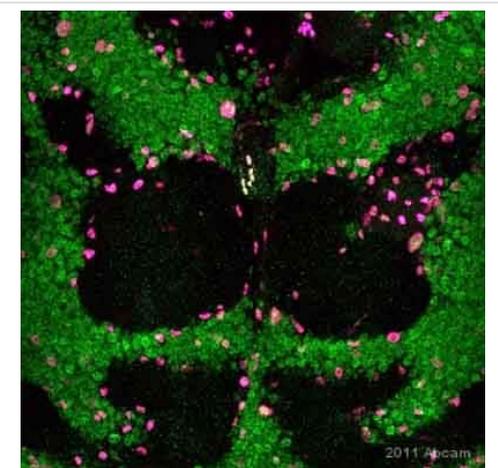
P0-adult mice were euthanized and perfused with 4% paraformaldehyde in PBS (PF). Their spinal cords were then post-fixed for 30–60 mins in 4% PF at 4°C (P0) or at room temperature (adult). Spinal cords were rinsed and cryoprotected in 20% sucrose in PBS (4°C) prior to embedding in OCT (Tissue-Tek). Immunostaining of frozen spinal sections was performed by incubating 20 μm thick sections with primary antibodies, which were then detected using species-specific secondary antibodies conjugated with Cy2, Cy3 and Cy5 or FITC. ab9361 was used at 1:1000.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Galactosidase antibody (ab9361)

This image is courtesy of an Abreview submitted by Laurel Baglia

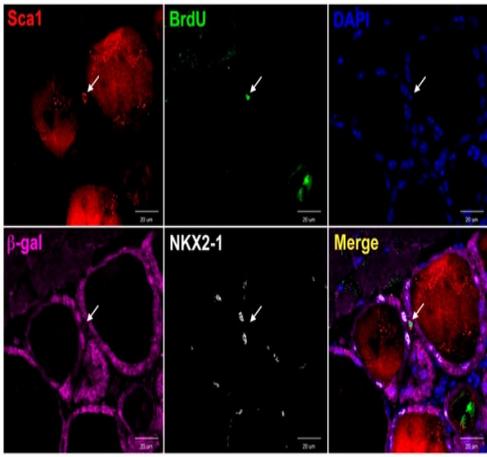
ab9361 staining beta Galactosidase in mouse e13 stomach and liver tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with Davidson's fixative, permeabilized with 0.5% Triton-X 100 and blocked with 10% serum for 30 minutes at 22°C; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/500 in TBST + 10% goat serum) for 16 hours at 4°C. A Biotin-conjugated goat anti-chicken IgY polyclonal (1/500) was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-beta Galactosidase antibody (ab9361)

Image courtesy of Dr Sean Speese by Abreview.

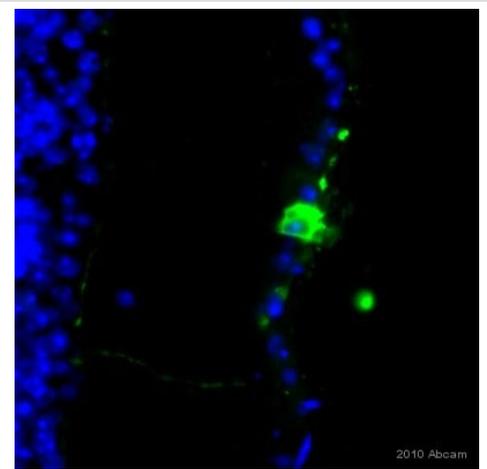
ab9361 staining beta Galactosidase in fruit fly central nervous system glia cells by Immunocytochemistry/ Immunofluorescence. The cells were fixed in paraformaldehyde, permeabilised in 0.1% Triton. Samples were then incubated with primary antibody at 1/2000 for 12 hours at 4°C. The secondary antibody used was a donkey anti-chicken monoclonal conjugated to DyLight® 649 (pink) used at a 1/400 dilution. Nuclei stained with a pan nuclear marker (green).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Galactosidase antibody (ab9361)

Image from PLoS One. 2013; 8(11): e80801, Fig 1B, doi: 10.1371/journal.pone.0080801 Reproduced under the Creative Commons license <https://creativecommons.org/publicdomain/zero/1.0/>

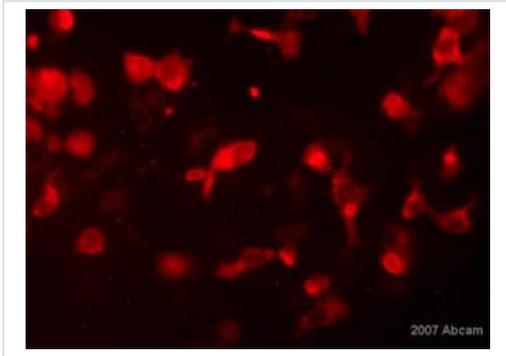
Ab9361 staining Beta galactosidase in Mouse thyroid tissue sections by Immunohistochemistry (PFA perfusion fixed frozen sections). Tissue samples were fixed 10% buffered formalin, cut into 3-4 micron slices, blocked with 10% normal goat serum and antigen retrieval was by heat mediation in citrate buffer. The sample was incubated with the following primary antibodies; anti-BrdU, anti-Sca1 (ab109211, 1:600), anti-NKX2-1 and anti-β-gal (ab9361, 1:1000). Sections were incubated with the first primary antibody (anti-Sca1) for 1 hour at room temperature. After washing with PBS, sections were incubated with the first secondary antibody (Alexa Fluor 555 goat anti-rabbit IgG) and washed with PBS. Sections were then incubated with normal serum (5% rabbit serum) from the same host species as the first primary antibodies for 1 hour at room temperature and washed with PBS. Sections were further incubated with an excess of unconjugated Fab antibody derived from the same host species as the primary antibody for 1 hour at room temperature and washed with PBS. The sections were finally incubated with the mixed second primary antibodies (anti-BrdU, anti-β-gal, anti-NKX2-1) overnight at 4°C, washed with PBS, and were incubated with the second secondary antibody (Alexa Fluor 488 goat anti-rat IgG, Dylight 650 goat anti-chicken IgY, Dylight 594 goat anti-rabbit IgG) for 1 hour at room temperature and washed with PBS. DAPI dye was used to stain the nuclei of cells.



Immunohistochemistry (Frozen sections) - Anti-beta Galactosidase antibody (ab9361)

This image is courtesy of an Abreview submitted by Dr Steven Hughes

ab9361 staining Beta Galactosidase in mouse retinal tissue sections by IHC-Fr (Frozen sections). Tissue samples were fixed with formaldehyde, permeabilized with 0.2% triton-X and blocked with 5% serum for 1 hour at 23°C. The sample was incubated with primary antibody (1/1500 in PBS, 2% serum, 0.2% Triton-X) at 4°C for 16 hours. An Alexa Fluor® 488-conjugated Goat monoclonal to chicken IgY (1/200) was used as secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-beta Galactosidase antibody (ab9361)

This image is courtesy of an Abreview submitted by Dr Deon Wolpowitz

ab9361 at 1/250 staining human HEK293T cells by ICC/IF. The cell line was transfected with a b-gal expressing plasmid, and x-gal staining was performed on adjacent wells. The cells were paraformaldehyde fixed and blocked with serum prior to incubation with the antibody for 16 hours. A Texas Red conjugated donkey anti-chicken antibody was used as the secondary.

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