

## Product datasheet

# Anti-beta Galactosidase antibody ab221199

[3 Images](#)

### Overview

<b>Product name</b>	Anti-beta Galactosidase antibody
<b>Description</b>	Rabbit polyclonal to beta Galactosidase
<b>Host species</b>	Rabbit
<b>Specificity</b>	This antibody recognizes beta Galactosidase from E coli and beta Galactosidase tagged proteins.
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Escherichia coli
<b>Immunogen</b>	Recombinant full length protein corresponding to Escherichia coli beta Galactosidase aa 1-1024. Sequence:  MTMITDSLAVVLQRRDWENPGVTQLNRLAAHPPFAS WRNSEEARTDRPSQ QLRSLNGEWQ FVWFPAPEAVPESWLECDLPDADTVVPSNWQMHG YDA PIYTNVTYPITVNPFFVPAENP TGCYSLTFNIDECWLQEGQTRIIDG VNSAFHLWCNGRWVGYGQDSRLPSEFDLSAFLRA GKNRLAVMVLRWSD GSYLEDQDMWRMSGIFRDVSLHKKPTTQISDFHVATR FNDDFSRAV LE AEVQMYGELRDELRVTVSLWQGETQVASGTAPFGGEI IDERGGYADRVTL RLVENPA LWSAEIPNIYRAVVELHTADGTLIEAEACDVGFREVRIE N GLLLLNGKPLLIRGVNRHEH HPLHGQVMDEQTMVQDILLMKQNNFNAV RCSHYPNHPLWYTLCDRYGLYVDEANIETHG MVPMNRLTDDPRWLPA MSERVTRMVLDRNHP SVIIVSLGNESGHGANHDALY RWIKSVD PSRP VQYEGGGADTTATDIICPMYARVDEDQFPVAVPKWSIK KWLSLPGELRPL ILCEYA HAMGNSLGGFAKYWQAFRQYPRQLQGGFVWDWVDQS LIKYDEN GNPWSAYGGDFGDPNDR QFCMNGLVFADRTPHPALTEAKHQQQFFQF RLSGRTIEVTSEYLFRRHSDNELLHWTVALD GKPLASGEVPLDVAPQGK QVIELPELPQPESAGQLWLT VHVVQPNATAWSEAGHI

SAWQQ WRLAEN  
 LSVTLPTASHAIPHLTTSEMDFCIELGNKRWQFNRSQSG  
 FLSQMWIGDEKQ LLTP  
 LRDQFTRAPLDNDIGVSEATRDPNAWVERWKAAGHY  
 QAEAALL QCTADTLADAVLITTA  
 HAWQHQGKTLFISRKTYRIDGSGQMAITVDVE  
 VASDTPHPARIGLTCQLAQAERVNWL  
 LGPQENYDRLTAACFDRWD  
 LPLSDMYTPYVFPSENGLRGCTRELNYPHQWRGDF  
 QFNI SRYSQQL  
 METSHRLLHAEEGTWLNIDGFHMGIGGDDSWSPSVS  
 AEFQLSAGRYHYQ LV WCQK

Database link: [B7UJ9](#)

 [Run BLAST with](#)

 [Run BLAST with](#)

**Positive control**

Purified beta Galactosidase; IPTG induced E.coli K12 cell extract; HEK293A cells transfected with beta Galactosidase cDNA.

**Properties**

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<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	Constituents: 50% PBS, 50% Glycerol
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

**Applications**

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Our [Abpromise guarantee](#) covers the use of **ab221199** 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 - 1/2000. Predicted molecular weight: 116 kDa.
IP		1/200 - 1/500.
ICC/IF		1/200 - 1/500.

**Target**

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**Relevance**

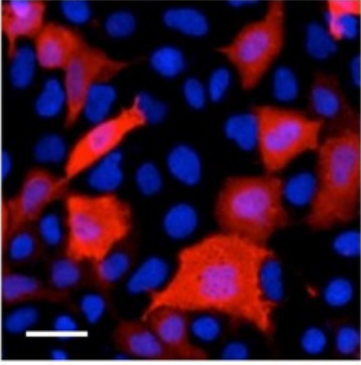
Beta galactosidase is coded by a gene (lac z) in the lac operon of Escherichia coli. It is a metalloenzyme that splits lactose into glucose and galactose. It hydrolyzes terminal, non-reducing beta-D-galactose residues in beta-D-galactosides. Activation by cations seems to be substrate

dependent.  $K^+$ ,  $Na^+$ ,  $NH_4^+$ ,  $Rb^+$ ,  $Cs^+$  and  $Mn^{++}$  all activate enzyme activity based upon the substrate used.

## Cellular localization

Cytoplasmic

## Images



Immunocytochemistry/ Immunofluorescence - Anti-beta Galactosidase antibody (ab221199)

Immunofluorescent analysis of HEK293A cells transfected with beta Galactosidase cDNA (4% PFA-fixed, methanol permeabilized) labeling beta Galactosidase with ab221199 at 1/500 dilution, followed by secondary detection with Alexa Fluor 555 conjugated anti rabbit IgG at 1/500 dilution (red). Hoechst 33342 was used for nuclear counterstaining (blue).



Western blot - Anti-beta Galactosidase antibody (ab221199)

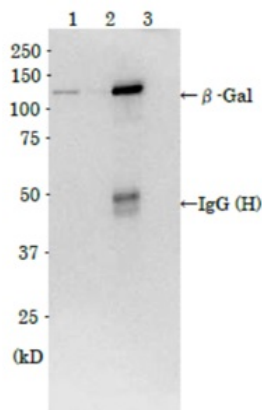
**All lanes** : Anti-beta Galactosidase antibody (ab221199) at 1/1000 dilution

**Lane 1** : purified beta Galactosidase at 0.01  $\mu$ g

**Lane 2** : uninduced E coli cell extract at 30  $\mu$ g

**Lane 3** : IPTG induced E coli cell extract at 30  $\mu$ g

**Predicted band size:** 116 kDa



Immunoprecipitation - Anti-beta Galactosidase antibody (ab221199)

beta Galactosidase was immunoprecipitated from IPTG induced E coli crude extracts using ab221199 at 1/500 dilution.

Western blot detection was performed using ab221199 at 1/1000 dilution.

Lane 1: Crude extract

Lane 2: Supernatant of the immunoprecipitated E. coli crude extract

Lane 3: Immunoprecipitate of crude E. coli extract

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

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