

**Anti-BETA GALACTOSIDASE (E.coli) (RABBIT) Antibody Biotin Conjugated**  
**Beta Galactosidase Antibody Biotin Conjugated**  
**Catalog # ASR4713****Specification****Anti-BETA GALACTOSIDASE (E.coli) (RABBIT) Antibody Biotin Conjugated - Product Information**

Host  
Conjugate  
Clonality  
Application  
Application Note

Rabbit  
Biotin  
Polyclonal  
WB, IHC, E, I, LCI  
Anti-Beta Galactosidase Biotin Conjugated Antibody has been tested by Western blot and is suitable for ELISA, immunohistochemistry, immunomicroscopy as well as other antibody based assays using streptavidin or avidin conjugates requiring lot-to-lot consistency. The antibody recognizes both frozen tissue sections, paraffin embedded tissue and 4% paraformaldehyde fixed tissue for most immunohistochemical analysis. A 1:5,000 dilution has been reported to be successful for staining by immunoblot of beta-galactosidase fusion proteins after transfer using a semi-dry transfer apparatus. A 1:1,500 dilution has been reported to detect beta-galactosidase in adult rat spinal cord tissue after infection with helper-dependent adenovirus expressing lacZ. In this particular experiment, tissue was perfused with 4% paraformaldehyde and cryostat-cut (35 µm) to produce free-floating sections. A 1:5,000 dilution has been reported to be successful for staining of brain sections from transgenic mice expressing nuclear beta-galactosidase when assayed by immunofluorescence microscopy. A 1:5,000 dilution has been reported for immunofluorescent staining of methanol fixed, devitellinized Drosophila embryos. Although a wide range of conditions was reported to be effective, a 1:10,000 dilution was noted to show no background and to be suitable for double labeling experiments. Optimal titers for other applications should be determined by the researcher.

Physical State  
Buffer

Lyophilized  
0.02 M Potassium Phosphate, 0.15 M

Immunogen  
Reconstitution Volume  
Reconstitution Buffer

Stabilizer

Preservative

**Sodium Chloride, pH 7.2**  
**Beta Galactosidase (E.coli)**  
**100 µL**  
**Restore with deionized water (or equivalent)**  
**10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free**  
**0.01% (w/v) Sodium Azide**

### **Anti-BETA GALACTOSIDASE (E.coli) (RABBIT) Antibody Biotin Conjugated - Additional Information**

**Gene ID** 945006

#### **Purity**

Anti-BETA GALACTOSIDASE Antibody, Biotin Conjugated, is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Biotin, anti-Rabbit Serum as well as purified and partially purified beta-Galactosidase [E.coli]. Cross reactivity against β-Galactosidase from other sources may occur but have not been specifically determined.

#### **Storage Condition**

Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

#### **Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

### **Anti-BETA GALACTOSIDASE (E.coli) (RABBIT) Antibody Biotin Conjugated - Protein Information**

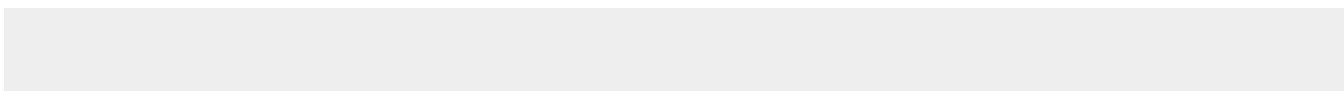
**Name** lacZ

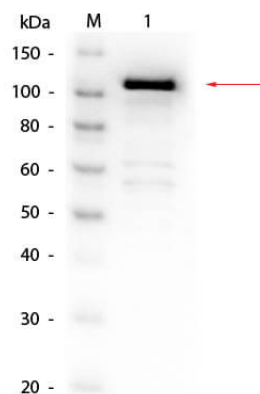
### **Anti-BETA GALACTOSIDASE (E.coli) (RABBIT) Antibody Biotin Conjugated - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **Anti-BETA GALACTOSIDASE (E.coli) (RABBIT) Antibody Biotin Conjugated - Images**





Western Blot of Rabbit anti-Beta Galactosidase (E. Coli) Antibody Biotin Conjugated. Lane 1: Beta Galactosidase. Load: 50 ng per lane. Primary antibody: Beta Galactosidase (E. Coli) Antibody Biotin Conjugated at 1:1,000 overnight at 4°C. Secondary antibody: HRP Streptavidin secondary antibody at 1:40,000 for 30 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 116 kDa, 116 kDa for Beta Galactosidase.

#### **Anti-BETA GALACTOSIDASE (E.coli) (RABBIT) Antibody Biotin Conjugated - Background**

Anti Beta Galactosidase Antibody recognizes the enzyme beta galactosidase, or  $\beta$ -galactosidase, that is a component of assays used frequently in genetics, molecular biology (see X-gal) for a blue white screen, and other life sciences. IPTG induces production of  $\beta$ -galactosidase by binding and inhibiting the lac repressor. Since it is highly expressed and accumulated in lysosomes in senescent cells, it is used as a senescence biomarker both in vivo and in vitro in qualitative and quantitative assays, despite its limitations.