OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TA396929S

lacZ Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IF, IHC, WB
Recommended Dilution:	**WB**: 1:5,000 - 1:10,000 **IHC**: 1:1,500 **IF**: User Optimized **ELISA**: 1:10,000
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Full length native Beta Galactosidase isolated from E.coli
Specificity:	Beta-Galactosidase Antibody 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-Rabbit Serum as well as purified and partially purified Beta Galactosidase [E.coli]. Cross reactivity against Beta Galactosidase from other tissues and species may occur but have not been specifically determined. Very low background staining has been reported in various assays.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	1.0mg/mL - lot specific
Conjugation:	Unconjugated
Storage:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Stability:	Expiration date is one (1) year from date of receipt.
Database Link:	P00722

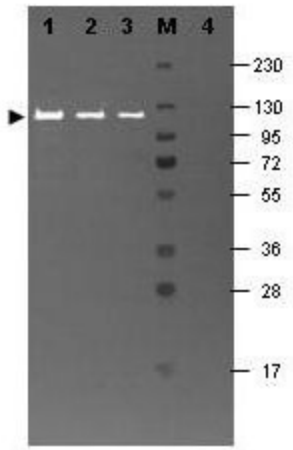
View online »

Background: Anti Beta Galactosidase Antibody recognizes the enzyme beta galactosidase, or β-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 β-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. Anti-beta Galactosidase Antibody is ideal for investigators involved in enzyme research.

Synonyms: rabbit anti-Beta Galactosidase Antibody, rabbit anti-beta gal antibody, β-Gal, Anti-β-Gal Antibody

Note: Anti-Beta-Gal Antibody has been tested by ELISA and western blot and is suitable for dot blot, immunofluorescence microscopy, immunoprecipitation, conjugation and most immunological methods requiring high titer and specificity. The antibody recognizes both frozen tissue sections, paraffin embedded tissue and 4% paraformaldehyde fixed tissue for most immunohistochemical analysis. 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.

Product images:



Western blotting using Rockland's Fluorescein conjugated anti-b-Galactosidase antibody shows a band at ~117 kDa (lanes 1 - 3) corresponding to 60 ng, 30 ng and 15 ng, respectively of b-Gal present in partially purified preparations (arrowhead). Lane 4 shows no cross reactivity with proteins present in a non-specific control E.coli lysate. Proteins were resolved on a 4-20% Tris-Glycine gel by SDS-PAGE and transferred to nitrocellulose and blocking using Blocking Buffer for Fluorescent Western Blotting (p/n MB-070). The membrane was probed with fluorescein conjugated anti-b-Galactosidase (p/n 200-4236) diluted to 1:10,000. Reaction occurred for 2 hours at room temperature. Molecular weight estimation was made by comparison to a prestained MW marker in lane M. Fluorescence image was captured using the VersaDoc® Imaging System developed by BIO-RAD. Other detection systems will yield similar results