

**SM3002P****Monoclonal Antibody to Beta-galactosidase tag (Center) - Purified**

<b>Alternate names:</b>	Beta-Gal Fusion Protein, Beta-Gal tag, JW0335, Lactase, b0344, lacZ tag
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	1.0 mg/ml
<b>Background:</b>	Beta galactosidase is coded by a gene ( <i>lac z</i> ) in the <i>lac</i> operon of <i>Escherichia coli</i> . 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 <sup>+</sup> , Na <sup>+</sup> , NH <sub>4</sub> <sup>+</sup> , Rb <sup>+</sup> , Cs <sup>+</sup> and Mn <sup>++</sup> all activate enzyme activity based upon the substrate used.
<b>Uniprot ID:</b>	<a href="#">P00722</a>
<b>NCBI:</b>	<a href="#">AP_000996.1</a>
<b>GeneID:</b>	<a href="#">945006</a>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Recommended Isotype</b>	AM03095PU-N
<b>Controls:</b>	
<b>Clone:</b>	BG-02
<b>Immunogen:</b>	Beta-Galactosidase purified from <i>E. coli</i>
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction from Ascites (> 95% pure by SDS-PAGE) <b>Purification:</b> Precipitation methods <b>Buffer System:</b> PBS, pH~7.4 <b>Preservatives:</b> 15 mM Sodium Azide
<b>Applications:</b>	<b>Western blot.</b> <b>Immunocytochemistry.</b> Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	The antibody recognizes a non-catalytic centre epitope of <i>beta-Galactosidase</i> from <i>E. coli</i> .
<b>Storage:</b>	Store undiluted at 2-8°C. <b>DO NOT FREEZE!</b> Shelf life: one year from despatch.
<b>Product Citations:</b>	<b>Originator or purchased from resellers:</b> 1. Slavícková A, Dráber P, Dráberová E, Dráber P, Viklický V. A novel panel of monoclonal antibodies against beta-galactosidase of <i>Escherichia coli</i> and its versatility for detection of recombinant expression products. <i>Folia Biol (Praha)</i> . 1992;38(6):350-7. PubMed PMID: 1284241. 2. Dráber P, Slavícková A, Sládeček M, Viklický V. Monoclonal antibodies to <i>Escherichia coli</i> beta-galactosidase and their use for detection and purification of recombinant expression products. <i>Hybridoma</i> . 1992 Jun;11(3):385-90. PubMed PMID:

1500073.

**Pictures:**

**Western blot** of purified *E. coli* beta-galactosidase sample; reduced sample, immunostained by mAb BG-02 and goat anti-mouse IgG (H+L)-HRP conjugate.

