



Product Specification Sheet

Monoclonal Anti-Beta Galactosidase

Cat. BGAL11-M	Mouse Monoclonal Anti-beta-galactosidase, ascites	SIZE: 100 ul
Cat. BGAL11-C	Recombinant Purified beta-galactosidase protein control for WB	SIZE: 100 ul
Cat. BGAL15-R	Recombinant purified beta-galactosidase protein	SIZE: 100 ug

Recombinant DNA technology allows the addition of short pieces of well-defined tags, "peptides" or proteins at the amino or c-terminus of target genes, which can provide 'affinity handles' designed to bind specific matrices. Therefore, tags enable a selective identification and purification of the protein of interest. Eukaryotic genes are often cloned into E. coli B-galactosidase (lacZ) gene, resulting in the expression of a desired protein as a fusion hybrid with B-galactosidase (1-3). Anti-B-galactosidase antibodies allow a simple isolation of fusion proteins directly from the crude bacterial lysates, using immunoaffinity chromatography (1-5) or used in immunoprecipitation. Anti-Beta galactosidase can also be used for the immunocytochemical detection of B-galactosidase in cells and tissues that express transfected bacterial lacZ gene (6). Anti-beta galactosidase may be used in various immunoassays to identify the expression of beta-galactosidase fusion protein.

Source of Antigen and Antibodies

Antigen	Recombinant purified E. coli Beta-galactosidase protein (Cat # BGAL15-R)
Ab Host/type	Mouse, monoclonal IgG1 Unpurified ascites (cat #BGAL11-M). It is supplied in PBS pH 7.4 and 0.05% azide. Store at -20oC in suitable size aliquots
2-ab	Goat Anti-mouse IgG-HRP conjugate Cat # SA-40320 (AP, biotin, FITC conjugates also available)
-ve control IgG	Cat # SA-20008-1, Mouse (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as -ve control

Recombinant purified E. coli Beta-galactosidase protein for Western blot +ve control (**Cat # BGAL11-C**) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of **#BGAL11-C** for good visibility with antibody **Cat # BGAL11-S**. Store at -20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the BGAL11-C solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is

required. This preparation is intended for qualitative purpose and not to serve as standard of known concentration. Do not freeze, thaw, or heat repeatedly
Recommended Usage

Western blot: Dilute antibody 1:1000-1:2000 for Western. B-galactosidase protein is ~16 kda. The mol wt will be higher if it is fused with another protein then the mol wt will be higher. The antibody does not detect the denatured or reduced protein. We recommend performing native gels for western.

Purified protein (Cat # BGAL15-R) can be used as positive control.

ELISA: 1:1000-1:10,000 of the antibody. The antibody reacts with the soluble and native enzyme coated on the ELISA plate.

Immunohistochemistry: not tested. 1:1200-1:500 dilution of the antibody is recommended.

Antibody concentration must be optimized for each application under defined experimental conditions.

General References: Dráber, P, et al., Hybridoma, 11, 385 (1992); Hayashibe, K., et al., J. Immunoassay, 11, 89 (1990); Shapiro, S., and Kimmel, B., J. Immunol. Meth., 97, 75 (1987); Gillard-Blass, S., et al., J. Immunol. Meth., 139, 207 (1991); Nielsen, O., et al., J. Immunol. Meth., 111, 1 (1988); MacGregor, G., et al., Somatic Cell Mol. Gen., 13, 253 (1987).

Storage

Short-term: unopened, undiluted liquid vials for less than a week at 4oC.

Long-term: at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20oC or below.

Shipping: 4oC for solutions and room temp for powder.

*This product is for In vitro research use only.

Other Fusion tag antibodies available from GSI

Anti-MBP, Poly-His, GST, beta-Gal, VSV-G, Flag, HA-tag, and c-myc

BGAL11-M-C 71215A