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#2372

## β-Gal (14B7) Mouse mAb

**For Research Use Only. Not for Use in Diagnostic Procedures.**

|   |                           |   |                                      |                               |                                  |
|---|---------------------------|---|--------------------------------------|-------------------------------|----------------------------------|
| <b>Applications:</b><br>W, IP, IF-IC, FC-FP | <b>Reactivity:</b><br>All | <b>Sensitivity:</b><br>Transfected Only | <b>Source/Isotype:</b><br>Mouse IgG1 | <b>UniProt ID:</b><br>#P00722 | <b>Entrez-Gene Id:</b><br>945006 |
|---|---------------------------|---|--------------------------------------|-------------------------------|----------------------------------|

### Product Usage Information

#### Application

Western Blotting  
Immunoprecipitation  
Immunofluorescence (Immunocytochemistry)  
Flow Cytometry (Fixed/Permeabilized)

#### Dilution

1:1000  
1:50  
1:3200  
1:7000

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

### Specificity/Sensitivity

Beta-Gal 14B7 Mouse mAb detects transfected beta-galactosidase fusion proteins.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with recombinant beta-galactosidase protein.

### Background

Epitope tags are useful for the labeling and detection of proteins using immunoblotting, immunoprecipitation, and immunostaining techniques. Because of their small size, they are unlikely to affect the tagged protein's biochemical properties.

Eukaryotic genes can be cloned into E. coli beta-galactosidase (lacZ) gene (1-3). This results in the expression of a fusion protein containing the desired protein with a beta-gal tag. An antibody to this tag can then be used to isolate the fusion protein or detect its expression within cells or tissues.

### Background References

- Dráber, P. et al. (1992) *Hybridoma* 11, 385-90.
- Hayashibe, K. et al. (1990) *J Immunoassay* 11, 89-95.
- Shapiro, S.Z. and Kimmel, B.E. (1987) *J Immunol Methods* 97, 275-9.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

### Applications Key

**W:** Western Blotting **IP:** Immunoprecipitation **IF-IC:** Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

### Cross-Reactivity Key

**All:** All Species Expected

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