

## Product Information

### Monoclonal Anti-Malectin, clone MLEC-13

produced in mouse, purified immunoglobulin

Catalog Number **SAB4200362**

#### Product Description

Monoclonal Anti-Malectin (mouse IgG1 isotype) is derived from the hybridoma MLEC-13 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a synthetic peptide corresponding to an internal region of human Malectin (GeneID: 9761), conjugated to KLH. The corresponding sequence is identical in monkey, mouse, rat, bovine, pig and canine. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2. The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-Malectin recognizes human, mouse and rat Malectin. The antibody may be used in various immunochemical techniques including immunoblotting (~32 kDa). Detection of the Malectin band by immunoblotting is specifically inhibited by the immunizing peptide.

Malectin is a type-I membrane-anchored ER protein conserved in most species. Its luminal part contains a carbohydrate binding domain with unique selectivity for Glc(2)Man(9)GlcNAc(2), an ER intermediate in the N-glycosylation pathway. Malectin appears to play a role in early steps of protein N-glycosylation, and in the folding and quality control of glycoproteins in the ER. Malectin may be involved in diseases that are associated with protein folding disorders.<sup>1-4</sup>

#### Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

#### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

#### Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze at -20 °C in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

#### Product Profile

**Immunoblotting:** a working antibody concentration of 2.5-5.0 µg/mL is recommended using whole extracts of HEK-293T cells over-expressing human Malectin, mouse Hepa 1-6 cells, or rat liver.

**Note:** In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration. Exposure to sensitive film is recommended.

#### References

- Schallus, T., et al., *Mol. Biol. Cell*, **19**, 3404-3414 (2008).
- Takeda, Y., et al., *Curr. Opin. Chem. Biol.*, **13**, 582-591 (2009).
- Pierce, J.M., and Taniguchi, N., *Proteomics*, **9**, 1738-1741 (2009).
- Schallus, T., et al., *Glycobiol.*, **20**, 1010-1020 (2010).

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