

## Product Information

### Monoclonal Anti-OS9, clone OS9-30

produced in mouse, purified immunoglobulin

Catalog Number **SAB4200316**

#### Product Description

Monoclonal Anti-OS9 (mouse IgG1 isotype) is derived from the hybridoma OS9-30 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a synthetic peptide corresponding to an internal sequence of human OS9 (GeneID: 10956), conjugated to KLH. The corresponding sequence is identical in mouse and rat OS9. 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-OS9 recognizes human, rat and mouse OS9 isoforms 1 and 2. The antibody may be used in various immunochemical techniques including immunoblotting (~97/88 kDa). Detection of the OS9 bands by immunoblotting is specifically inhibited by the immunizing peptide.

OS9 is an ER-resident lectin involved in ER quality control. OS9 is upregulated in response to ER stress through activation of the Ire1/Xbp1 pathway. OS9 associates both with components of the ERAD machinery and ERAD substrates. It binds to misfolding proteins preventing their secretion from the ER and directing them to the SEL1L/HRD1 dislocation and ubiquitylation complex in the ER membrane. Two OS9 spliced variants, OS-9.1 and OS-9.2, exist. Both variants are ubiquitously expressed in human tissues and are amplified in tumors.<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 concentration of 2-4 µg/mL is recommended using whole extracts of human MCF7 cells.

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

#### References

1. Bernasconi, R., et al., *J. Biol. Chem.*, **283**, 16446-16454 (2008).
2. Tamura, T., et al., *Trends Biochem. Sci.*, **33**, 298-300 (2008).
3. Christianson, J.C., et al., *Nat. Cell Biol.*, **10**, 272-282 (2008).
4. Alcock, F., and Swanton, E., *J. Mol. Biol.*, **385**, 1032-1042 (2009)

ST,RC,KAA,PHC 07/11-1

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