

Product Information

Anti-Deptor

produced in rabbit, affinity isolated antibody

Product Number **SAB4200214**

Product Description

Anti-Deptor is produced in rabbit using as the immunogen a synthetic peptide corresponding to a fragment of human deptor (GenelD: 64798), conjugated to KLH. The corresponding sequence is identical in mouse, rat and canine deptor. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-Deptor recognizes human, mouse, rat, and canine deptor. The antibody may be used in several immunochemical techniques including immunoblotting (~48 kDa). Detection of the deptor band by immunoblotting is specifically inhibited by the immunizing peptide.

Deptor (DEP-domain-containing mTOR-interacting protein) is an mTOR-binding protein that acts as a negative regulator of the mTORC1 and mTORC2 signaling pathways. Deptor contains two DEP domains and one PDZ (DHR) domain. Through the PDZ domain deptor interacts with mTOR within both complexes mTORC1 and mTORC2. Depletion of deptor activates S6K1, Akt, and SGK1, promotes cell growth and survival, and activates mTORC1 and mTORC2 kinase activities. While overexpression of deptor inhibits mTORC1, it relieves mTORC1 feedback inhibition of PI3K leading to the activation of the PI3K/mTORC2/Akt pathway. Deptor expression is low in most cancers; however, it is highly expressed in multiple myelomas harboring cyclin D1/D3 or c-MAF/MAFB translocations.¹⁻³

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

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at -20 °C. For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze 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 dilutions should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 0.5-1.0 µg/mL is recommended using whole extracts of human ACHN and mouse A9 cells; a working concentration of 1-2 µg/mL is recommended using whole extracts of rat RAT2 cells.

Note: In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

References

1. Peterson, T.R., et al., *Cell*, **137**, 873-886 (2009).
2. Proud, C.G., *J. Mol. Cell Biol.*, **1**, 61-63 (2009).
3. Laplante, M., and Sabatini, D.M., *J. Cell Sci.*, **122**, 3589-3594 (2009).

VS,ST,CS,KAA,PHC,MAM 07/19-1