bsm-51285M **[Primary Antibody]**

Raptor Mouse mAb

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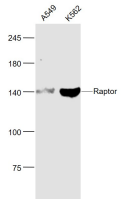
DATASHEET

Host: Mouse
Isotype: IgG1
Clonality: Monoclonal
CloneNo.: 7G4
GeneID: 57521
SWISS: Q8N122
Target: Raptor
Purification: affinity purified by Protein G
Concentration: 1mg/ml
Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: mTOR controls cell growth, in part by regulating p70 S6 kinase alpha (p70alpha) and eukaryotic initiation factor 4E binding protein 1 (4EBP1). Raptor is a 150 kDa mTOR binding protein that also binds 4EBP1 and p70alpha. The binding of Raptor to mTOR is necessary for the mTOR-catalyzed phosphorylation of 4EBP1 in vitro, and it strongly enhances the mTOR kinase activity toward p70alpha. Rapamycin or amino acid withdrawal increases, whereas insulin strongly inhibits, the recovery of 4EBP1 and raptor on 7-methyl-GTP Sepharose. Partial inhibition of raptor expression by RNA interference (RNAi) reduces mTOR-catalyzed 4EBP1 phosphorylation in vitro. RNAi of C. elegans raptor yields an array of phenotypes that closely resemble those produced by inactivation of Ce-TOR. Thus, raptor is an essential scaffold for the mTOR-catalyzed phosphorylation of 4EBP1 and mediates TOR action in vivo.

Applications: **WB** (1:500-2000)
ELISA (1:5000-10000)
Reactivity: Human
Predicted MW.: 147 kDa
Subcellular Location: Cytoplasm

VALIDATION IMAGES



Sample: A549(Human) Cell Lysate at 30 ug
K562(Human) Cell Lysate at 30 ug Primary: Anti-Raptor (bsm-51285M) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution Predicted band size: 147 kD
Observed band size: 140 kD

SELECTED CITATIONS

- **[IF=4.2]** Suzanne M de la Monte. et al. Dysregulated mTOR networks in experimental sporadic Alzheimer's disease. FRONT CELL NEUROSCI. 2024 Sep 25:18:1432359 ELISA ;Rat. 39386180
- **[IF=4.2]** Suzanne M de la Monte. et al.Dysregulated mTOR networks in experimental sporadic Alzheimer’ s disease.front cell neurosci.2024 Sep 25:18:1432359. ELISA ;Rat. 3938618