

Product name:	Raptor (Phospho-Ser863) Rabbit Polyclonal Antibody
Cat number:	ABN06063
Conjugate:	Unconjugated
Size:	100μL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized peptide derived from human Raptor (Phospho-Ser863)
Reactivity:	Human, Mouse, Rat
Applications:	WB 1:500-1:2000
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.
Background:	function: Participates in the FRAP1 pathway and associates in a near stoichiometric ratio with FRAP1 to form a nutrient-sensitive complex (NSC). Plays a pivotal role as a scaffold protein in the FRAP1-signaling pathway and this interaction is essential for the catalyzed phosphorylation of EIF4EBP1. Has a positive role in nutrient-stimulated signaling to the downstream effector RPS6KB1. Under nutrient-deprived conditions, serves as a negative regulator of FRAP1 kinase activity. Regulation of the interaction with FRAP1 is a critical mechanism by which cells coordinate the rate of cell growth and maintenance of cell size with different environmental conditions., miscellaneous: Rapamycin destabilizes the interaction with FRAP1 regardless of nutrient availability, and its potency for dissociation is increased under nutrient-rich conditions. This action uncouples FRAP1 from its substrates, and inhibits FRAP1 signaling without altering its intrinsic catalytic activity., similarity: Belongs to the WD repeat RAPTOR family., similarity: Contains 7 WD repeats., subunit: Binds directly 4EBP1 and RPS6KB1 independently of its association with FRAP1. Binds preferentially to poorly or non-phosphorylated form of EIF4EBP1, and this binding is critical to the ability of FRAP1 to catalyze phosphorylation. Complex with FRAP1 physically interacts under both leucine-rich and -poor conditions and therefore in at least two nutrient-determined states with different stability., tissue specificity: Highly expressed in skeletal muscle, and in a lesser extent in brain, lung, small intestine, kidney and placenta.,