

Immunotag™ RPTOR Polyclonal Antibody

Antibody Specification	
Catalog No.	ITN0044
Product Description	Immunotag™ RPTOR Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	RPTOR
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Reactive Species	Human
Host Species	Rabbit
Immunogen	Synthesized peptide derived from human protein . at AA range: 730-810
Specificity	RPTOR Polyclonal Antibody detects endogenous levels of protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Gene Name	RPTOR KIAA1303 RAPTOR
Accession No.	Q8N122 Q8K4Q0

Antibody Specification

Description	regulatory associated protein of MTOR complex 1(RPTOR) Homo sapiens This gene encodes a component of a signaling pathway that regulates cell growth in response to nutrient and insulin levels. The encoded protein forms a stoichiometric complex with the mTOR kinase, and also associates with eukaryotic initiation factor 4E-binding protein-1 and ribosomal protein S6 kinase. The protein positively regulates the downstream effector ribosomal protein S6 kinase, and negatively regulates the mTOR kinase. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2009],
Cell Pathway/ Category	mTOR,Insulin_Receptor,
Protein Expression	Bone,Brain,Epithelium,Placenta,
Subcellular Localization	nucleoplasm,cytoplasm,lysosome,lysosomal membrane,cytosol,dendrite,TORC1 complex,neuronal cell body,intracellular membrane-bounded organelle,
Protein Function	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.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.