RPTOR

Rabbit Anti-Human Regulatory Associated Protein of MTOR complex 1 Clone Poly6232 pAb

Catalog No.	CSI14414 CSI14415	**Quantity:**	50 µl 200 µl

Alternate Names: Regulatory associated protein of mTOR, p150 target of rapamycin (TOR)-scaffold protein

Description: Raptor, also known as regulatory associated protein of mTOR, is a scaffold protein of approximately 150 kD that is highly expressed in skeletal muscle. Raptor functions as an essential scaffold for mTOR-catalyzed phosphorylation of 4EBP1 critical for TOR activity in vivo. Raptor is involved in nutrient-stimulated signaling to the downstream effector RPSKB1 and has been shown to negatively regulate the FRAP1 kinase under conditions of nutrient deprivation. Raptor/FRAP1 interactions are critical for the coordination of cell size and cell growth under different environmental conditions. The Raptor protein has been shown to interact with mTOR, 4EBP1, RPS6KB1 and FRAP1. The Poly6232 antibody recognizes human Raptor and has been shown to be useful for Western blotting.

Structure: mTOR scaffold protein, contains 7 WD repeats, 150 kD. Alternatively spliced variants have been reported.

Gene ID: 57521

Distribution: Highly expressed in skeletal muscle, expressed in lower amounts in brain, lung, small intestine, kidney, and placenta.

Function: Essential scaffold for mTOR-catalyzed phosphorylation of 4EBP1 critical for TOR activity in vivo. Has positive role in nutrient-stimulated signaling to the downstream effector RPSKB1. Raptor negatively regulates FRAP1 kinase under conditions of nutrient-d.

Host: Rabbit

Immunogen: Peptide-KLH

Isotype: IgG

Clone: Poly6232

Interaction: Binds to mTOR, 4EBP1 amd RPS6KB1; forms complex with FRAP1.

Formulation: This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 50% glycerol. **Precaution:** Sodium azide is a poisonous and hazardous substance which should be handled by trained staff only.

Purification: The antibody was purified by antigen-affinity chromatography.

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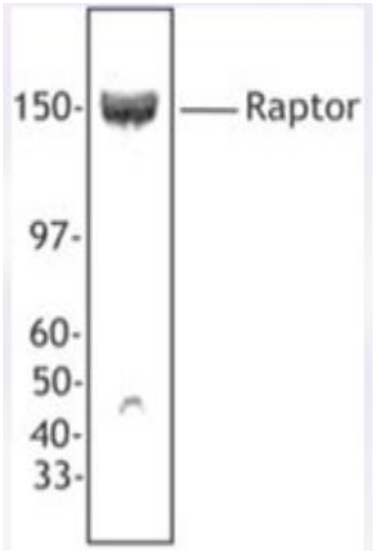
Reactivity: Human

Applications: WB - Quality tested
IHC - Validated

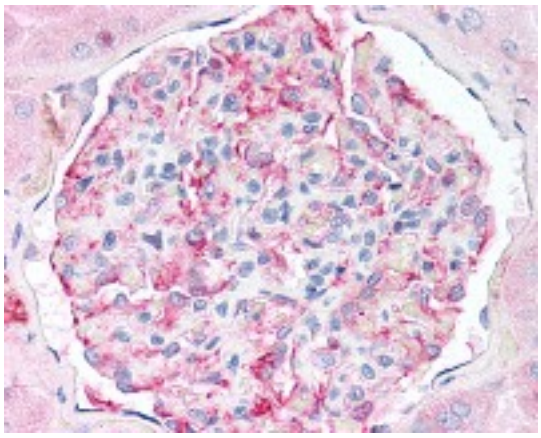
Recommended Usage: Each lot of this antibody is quality control tested by Western blotting. Western blotting, suggested working dilution(s): Use 10 µl per 5 ml antibody dilution buffer for each mini-gel. For IHC, use a 1:50 dilution of antibody for staining. Antigen retrieval for IHC of formalin-fixed paraffin-embedded tissue using 0.01 M sodium citrate buffer is recommended. It is recommended that the reagent be titrated for optimal performance for each application.

Storage & Stability: Upon receipt, store frozen at -20° C.

293T cell extract was resolved by electrophoresis, transferred to nitrocellulose, and probed with rabbit anti-Raptor antibody. Proteins were visualized using a donkey anti-rabbit secondary conjugated to HRP and a chemiluminescence detection system.



Formalin-fixed paraffin-embedded human kidney tissue was stained with Poly6232 and developed with an alkaline phosphatase chromogen substate (red color). Tissue was counterstained with H&E (blue/pink). Magnification, 40X.



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