

RICTOR Monoclonal Antibody (1G11)

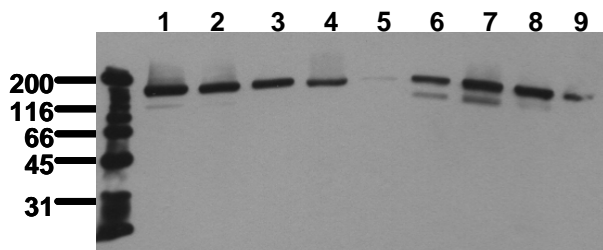
| Product Specifications | |
|---|---|
| Catalog Number: | 905-766-100 |
| Host: | Mouse |
| Isotype: | IgG ₁ |
| Species Reactivity: | Human, mouse, and rat |
| Applications: <i>The optimal dilution for a specific application must be determined by the investigator</i> | WB: 0.5 µg/mL (ECL) |
| Predicted m.w.: | ~190 kDa |
| Concentration: | See product label |
| Purification: | Ultrafiltration and size exclusion chromatography |
| Format: | Lyophilized from 2x PBS, 0.09% sodium azide, PEG, sucrose; reconstitute with 1 mL of water for 15 min at RT |
| Storage: <i>Shipping conditions may differ from the recommended storage temperature</i> | Store at -20°C; store at -80°C after reconstitution (aliquot to avoid repeated freeze/thaw cycles) |
| Immunogen: | Synthetic phospho-peptide derived from the sequence of Rictor, conjugated to hemocyanin |
| Related Products: | |
| 905-687 | mTOR Polyclonal Antibody |
| 905-765 | Raptor Monoclonal Antibody |

Background:

The mTOR (mammalian target of rapamycin) pathway coordinates nutrient signals with growth factor dependent signaling^{1,2}. mTOR is organized in two independent protein complexes, mTORC1 and mTORC2. The mTORC1 complex containing mTOR, GβL/mLST8 and Raptor is sensitive to rapamycin, while the mTORC2 complex containing mTOR, GβL/mLST8, SIN1, and Rictor is rapamycin insensitive. The mTOR/Rictor complex phosphorylates numerous substrates associated with regulation of the actin cytoskeleton, and also is responsible for phosphorylation of Akt/PKB at Serine 473, a critical step in Akt activation^{3,4}.

References:

1. Corradetti, M.N. and Guan, K.L. (2006) *Oncogene* **25**, 6347-6360.
2. Bhaskar, P.T. and Hay, N. (2007) *Dev Cell* **12**, 487-502.
3. Sarbassov, D.D., *et al.* (2005) *Science* **307**, 1098-1101.
4. Jacinto, E., *et al.* (2004) *Nat Cell Biol.* **6**, 1122-1128.



Western blot analysis of serum starved cancer cells probed with Rictor Monoclonal Antibody (1G11); HeLa (1), HepG2 (2), HEK293 (3), SH-SY5Y (4), MDCK (5), PC12 (6), CTM93 (7) Neuro 2A (8), NIH-3T3 (9)