Product Data Sheet: Phospho-Met (Y1234/Y1235)

Cat. No:	MAB-3305
Conjugate:	Unconjugated
Size:	100 ug
Clone:	3D7
Concentration:	1mg/ml
Host:	Rb
Isotype:	IgG
Reactivity:	Hu, Ms, Rt
Applications:	Western Blotting 1:1000
Molecular Weight:	145 kDa
Purification:	Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr1234/1235 of human Met.
Background:	Met, a high affinity tyrosine kinase receptor for hepatocyte growth factor (HGF, also known as scatter factor) is a disulfide-linked heterodimer made of 45 kDa α- and 145 kDa β-subunits (1,2). The α-subunit and the amino-terminal region of the β-subunit form the extracellular domain. The remainder of the β-chain spans the plasma membrane and contains a cytoplasmic region with tyrosine kinase activity. Interaction of Met with HGF results in autophosphorylation at multiple tyrosines, which recruit several downstream signaling components, including Gab1, c-Cbl, and PI3 kinase (3). These fundamental events are important for all of the biological functions involving Met kinase activity. The addition of a phosphate at cytoplasmic Tyr1003 is essential for Met protein ubiquitination and degradation (4). Phosphorylation at Tyr1234/1235 in the Met kinase domain is critical for kinase activation. Phosphorylation at Tyr1349 in the Met cytoplasmic domain provides a direct binding site for Gab1 (5). Altered Met levels and/or tyrosine kinase activities are found in several types of tumors, including renal, colon, and breast. Thus, Met is an attractive cancer therapeutic and diagnostic target (6,7).Phospho-Met (Tyr1234/1235) (3D7) Rabbit mAb detects endogenous levels of Met only when phosphorylated at tyrosine 1234/1235. This antibody may cross-react with activated Ron and FGF receptors.
Form:	liquid
Buffer:	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage:	Store at -20°C, and avoid repeat freeze-thaw cycles.

References

(1) Cooper, C.S. et al. Nature 311, 29-33. (2) Bottaro, D.P. et al. (1991) Science 251, 802-4. (3) Bardelli, A. et al. (1997) Oncogene 15, 3103-11. (4) Taher, T.E. et al. (2002) J Immunol 169, 3793-800. (5) Schaeper, U. et al. (2000) J Cell Biol 149, 1419-32. (6) Eder, J.P. et al. (2009) Clin Cancer Res 15, 2207-14. (7) Sattler, M. and Salgia, R. (2009) Update Cancer Ther 3, 109-118.

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