Revision 4

#9178 Store at -20C

Mer (348E6) Mouse mAb

Cell Signaling TECHNOLOGY®

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H	Endogenous	210	Mouse IgG1	#Q12866	10461

Product Usage Information

Application	Dilution
Western Blotting	1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #20912.

Specificity/Sensitivity

Mer (348E6) Mouse mAb detects endogenous levels of Mer proteins. It does not cross-react with other receptor tyrosine kinase family members.

Source / Purification

Monoclonal antibody is produced by immunizing animals with recombinant human Mer extracellular domain produced in Sf21 cells.

Background

Mer tyrosine kinase belongs to a receptor tyrosine kinase family with Axl and Tyro3. This family is characterized by a common NCAM (neural adhesion molecule)-related extracellular domain and a common ligand, GAS6 (growth arrest specific protein 6). Mer protein has an apparent molecular weight of 170-210 kDa due to different glycosylation patterns generated in different cell types. Mer can be activated by dimerization and autophosphorylation through ligand binding or homophilic cell-cell interaction mediated by its NCAM-like motif (1). The downstream signaling components of activated Mer include PI3 kinase, PLCγ, and MAP kinase (2). Family members are prone to transcriptional regulation and carry out diverse functions, including the regulation of cell adhesion, migration, phagocytosis, and survival (3). Mer regulates macrophage activation, promotes apoptotic cell engulfment, and supports platelet aggregation and clot stability *in vivo* (4). Investigators have found that overexpression of Mer may play a cooperative role in leukemogenesis and may be an effective target for biologically based leukemia/lymphoma therapy (5).

Background References

1. Ling, L. et al. (1996) *J Biol Chem* 271, 18355-62.
2. Ling, L. and Kung, H.J. (1995) *Mol Cell Biol* 15, 6582-92.
3. Hafizi, S. and Dahlbäck, B. (2006) *Cytokine Growth Factor Rev* 17, 295-304.
4. Sather, S. et al. (2007) *Blood* 109, 1026-33.
5. Keating, A.K. et al. (2006) *Oncogene* 25, 6092-100.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human

Trademarks and Patents

Limited Uses

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