Mer (D21F11) XP® Rabbit mAb (Sepharose® Bead Conjugate)

For Research Use Only. Not For Use In Diagnostic Procedures.

<table>
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<tr>
<th>Applications</th>
<th>Species Cross-Reactivity</th>
<th>Molecular Wt.</th>
<th>Isotype</th>
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<td>IP Endogenous</td>
<td>Enogenous</td>
<td>210 kDa</td>
<td>Rabbit IgG</td>
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**Description:** This Cell Signaling Technology antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated Sepharose® beads. Mer (D21F11) XP® Rabbit mAb (Sepharose® Bead Conjugate) is useful for the immunoprecipitation of Mer. The antibody is expected to exhibit the same species cross-reactivity as the unconjugated Mer (D21F11) XP® Rabbit mAb #4319.

**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 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).

**Specificity/Sensitivity:** Mer (D21F11) XP® Rabbit mAb (Sepharose® Bead Conjugate) detects endogenous levels of total Mer protein.

**Source/Purification:** Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding His925 of human Mer protein.

**Recommended Antibody Dilutions:**
- Immunoprecipitation: 1:20

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol. Store at –20°C.

**For application specific protocols please see the web page for this product at www.cellsignal.com.**

**Background References:**

**Immunoprecipitation of Hep G2 cell lysates using Mer (D21F11) XP® Rabbit mAb (Sepharose® Bead Conjugate) and Rabbit (DA1E) mAb IgG XP® Isotype Control (Sepharose® Bead Conjugate) #3423. The western blot was probed using Mer (348E6) Mouse mAb #9178.**

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**Immunoprecipitation of Jurkat and Hep G2 cell lysates using Mer (D21F11) XP® Rabbit mAb (Sepharose® Bead Conjugate) and Rabbit (DA1E) mAb IgG XP® Isotype Control (Sepharose® Bead Conjugate) #3423. The western blot was probed using Mer (D21F11) XP® Rabbit mAb #4319.**

Mer (D21F11) XP® Rabbit mAb (Sepharose® Bead Conjugate) and Rabbit (DA1E) mAb IgG XP® Isotype Control (Sepharose® Bead Conjugate) #3423. The western blot was probed using Mer (D21F11) XP® Rabbit mAb #4319.