

DESCRIPTION

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|---------------------------|---|
| Species Reactivity | Mouse |
| Specificity | Detects mouse Mer in direct ELISAs and Western blots. Does not cross-react with recombinant human Mer, recombinant mouse (rm) Axl, or rmDtk. |
| Source | Monoclonal Rat IgG ₁ Clone # 108921 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | <i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant mouse Mer Glu23-Phe498 Accession # Q60805 |
| Endotoxin Level | <0.10 EU per 1 µg of the antibody by the LAL method. |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

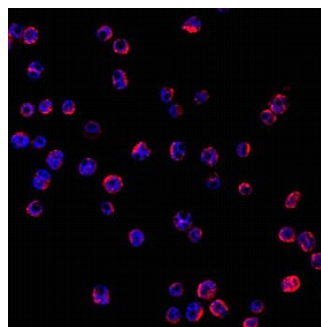
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|----------------------------|----------------------------------|---|
| Western Blot | 1 µg/mL | Recombinant Mouse Mer Fc Chimera (Catalog # 591-MR) |
| Immunocytochemistry | 8-25 µg/mL | See Below |

DATA

Immunocytochemistry



Mer in J774A.1 Mouse Cell Line. Mer was detected in immersion fixed J774A.1 mouse reticulum cell sarcoma macrophage cell line using Rat Anti-Mouse Mer Monoclonal Antibody (Catalog # MAB591) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). Specific staining was localized to cell surfaces. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

PREPARATION AND STORAGE

| | |
|--------------------------------|--|
| Reconstitution | Reconstitute at 0.5 mg/mL in sterile PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

Axl (Ufo, Ark), Dtk (Sky, Tyro3, Rse, Brt) and Mer (human and mouse homologues of chicken c-Eyk) constitute a receptor tyrosine kinase subfamily. The extracellular domains of these proteins contain two Ig-like motifs and two fibronectin type III motifs. This characteristic topology is also found in neural cell adhesion molecules and in receptor tyrosine phosphatases. These receptors bind the vitamin K-dependent protein growth-arrest-specific gene 6 (Gas6) which is structurally related to the anticoagulation factor protein S. Binding of Gas6 induces receptor autophosphorylation and downstream signaling pathways that can lead to cell proliferation, migration or the prevention of apoptosis. Studies suggest that this family of tyrosine kinase receptors may be involved in hematopoiesis, embryonic development, tumorigenesis and regulation of testicular functions (1-2).

References:

1. Nagata, K. *et al.* (1996) *J. Biol. Chem.* **22**:30022.
2. Crosier, K.E. and P.S Crosier (1997) *Pathology* **29**:131.