

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Dtk extracellular domain in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human Dtk, recombinant mouse (rm) Mer, or rmAxl is observed.
Source	Monoclonal Rat IgG ₁ Clone # 109646
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Dtk Ala31-Ser418 Accession # P55144
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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
Flow Cytometry	0.25-1 µg/10 ⁶ cells	Mouse embryoid bodies differentiated from D3 mouse embryonic stem cell line

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Axl (Ufo, Ark), Dtk (Sky, Tyro3, Rse, Brt) and Mer (human and mouse homologues of chicken c-Eyk) constitute a new receptor tyrosine kinase subfamily. The extracellular domain 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. All three receptors bind the vitamin K-dependent protein growth-arrest specific gene 6 (Gas6) which is structurally related to the anticoagulation factor protein S. The binding affinities for Gas6 is in the order of Axl > Dtk > Mer. Gas6 binding induces tyrosine phosphorylation and downstream signaling pathways that can lead to cell proliferation, migration, or the prevention of apoptosis. Dtk is widely expressed during embryonic development. In adults, Dtk is predominantly expressed in neurons in restricted regions of the brain.

References:

1. Nagata, K. *et al.* (1996) J. Biol. Chem. **271**:30022.
2. Crosier, K.E. and P.S. Crosier (1997) Pathology **29**:131.

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