R&D Systems

Tools for Cell Biology Research™

Mouse Dtk APC-conjugated Antibody

Monoclonal Rat IgG₁ Clone # 109646

Catalog Number: FAB759A

100 TESTS

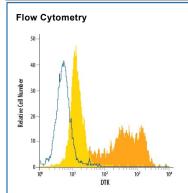
DESCRIPTION			
Species Reactivity	Mouse		
Specificity	Detects mouse Dtk extracellular domain in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human Dtk, recombinant mouse (rm) Mer, or rmAxl is observed.		
Source	Monoclonal Rat IgG ₁ Clone # 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	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 nm		
Formulation	Supplied 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	10 μL/10 ⁶ cells	See Below

DATA



Detection of Dtk in D3 Mouse Cell Line by Flow Cytometry. D3 mouse embryonic stem cell line untreated (light orange filled histogram) or treated with Retinoic Acid for 48 hours (dark orange filled histogram) was stained with Rat Anti-Mouse Dtk APC-conjugated Monoclonal Antibody (Catalog # FAB759A) or isotype control antibody (Catalog # IC005A, open histogram). View our protocol for Staining Membrane-associated Proteins.

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. 22:30022.
- 2. Crosier, K.E. and P.S Crosier (1997) Pathology 29:131.

