

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Dtk in ELISAs and Western blots. In ELISAs and Western blots, no cross-reactivity or interference with recombinant mouse Dtk, recombinant human (rh) Axl, or rhMer is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 96201
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human Dtk Ala41-Ser428 (predicted) Accession # Q06418
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 Human Dtk Fc Chimera (Catalog # 859-DK)
Immunohistochemistry	8-25 µg/mL	Immersion fixed paraffin-embedded sections of human kidney
Human Dtk Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Human Dtk Antibody (Catalog # MAB859)
ELISA Detection	0.1-0.4 µg/mL	Human Dtk Biotinylated Antibody (Catalog # BAF859)
Standard		Recombinant Human Dtk Fc Chimera (Catalog # 859-DK)

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

Dtk (also called Sky, Tyro3, Rse, Brt), Axl (Ufo, Ark) and Mer (human and mouse homologues of chicken c-Eyk) constitute a 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.