

DESCRIPTION

Species Reactivity	Mouse/Rat
Specificity	Detects mouse and rat DDT in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse DDT Pro2-Leu118 Accession # O35215
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

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

Mouse DDT (D-dopachrome tautomerase; also D-dopachrome decarboxylase and Phenylpyruvate tautomerase) is a 13 kDa member of the carboxy-lyases family. The DDT gene in mouse, rat and human is identical in exon structure to the Macrophage migration inhibitory factor (MIF) gene. Both genes have 2 introns that are located at equivalent positions, relative to a 2-fold repeat in protein structure. The genes for DDT and MIF are closely linked on human chromosome 22 and mouse chromosome 10. DDT mRNA levels in human adipocytes are negatively correlated with obesity. The study on DDT knock-down adipocytes shows an increase in the expression of genes involved in both lipolysis and lipogenesis. DDT binds CD74 with high affinity, leading to activation of ERK1/2 MAP kinase and downstream pro-inflammatory pathways. Circulating levels of DDT correlate with disease severity in sepsis or malignancy. DDT also inhibits chemotaxis induced by CCL2 in macrophages. DDT in tumor angiogenesis promotes the expression of pro-angiogenic factors CXCL8 (IL8) and VEGF-A in non-small cell lung carcinoma cells through the CD74 receptor. Over aa 2-118, mouse DDT shares 95.7% and 73.5% aa identity with rat and human DDT, respectively.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.