

DESCRIPTION

Species Reactivity	Human
Specificity	Detects TACE/ADAM17 Ectodomain in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with the ectodomain of recombinant human (rh) ADAM8, rhADAM9, or rhADAM15 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 111636
Purification	Protein A or G purified from ascites
Immunogen	Insect ovarian cell line <i>T. ni</i> -derived recombinant human TACE/ADAM17 Pro18-Asn671 (predicted) Accession # P78536
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 either lyophilized or 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 TACE/ADAM17 Western Blot Standard (Catalog # WBC029) under non-reducing conditions only

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

TACE is a member of the ADAM family that contains A Disintegrin And Metalloprotease-like domain. Like other membrane-anchored ADAMs, TACE consists of a pro domain with a cysteine switch and furin cleavage sequence, a catalytic domain with the zinc-binding site and Met-turn expected for reprotolysins, a disintegrin-like domain, a cysteine-rich domain, an EGF-like domain, a transmembrane domain, and the cytoplasmic domain. In addition to its ability to release the 17 kDa extracellular form of tumor necrosis factor-α (TNF-α) from the 26 kDa membrane-anchored TNF-α, TACE also plays an essential role in shedding ectodomains from a variety of proteins such as L-Selectin, Transforming Growth Factor-α, Amyloid Protein Precursor, and Notch-1 receptor. TACE mRNA is present in virtually every tissue and TACE protein resides both on the cell surface and in the cell.

References:

1. Black, R.A. and J.D. Becherer (1998) in *Tumor Necrosis Factor α-Converting Enzyme*. Barrett, A.J. *et al.* (eds): Handbook of Proteolytic Enzymes, San Diego: Academic Press, p. 1315.
2. Primakoff, P. and D.G. Myles (2000) *Trends in Genetics* **16**:83.