# **ZYMED®** Laboratories

### invitrogen immunodetection

Qty: 100μg/400 μL

Rabbit anti-TRAF6 (C-term)

Catalog No. 38-0900

Lot No.

## Rabbit anti-TRAF6 (C-term)

#### **FORM**

This polyclonal antibody is supplied as a 400 µL aliquot at a concentration of 0.25 mg/mL in phosphate buffered saline (pH 7.4) containing 0.1% sodium azide. This antibody is peptide-affinity purified from rabbit antiserum.

**PAD:** ZMD.338

#### **IMMUNOGEN**

Synthetic peptide derived from the C-terminal region of the human and mouse TRAF6 (TNF receptor-associated factor 6) protein.

#### **SPECIFICITY**

This antibody reacts with the human and mouse TRAF6 proteins. On Western blots, it identifies a band at ~55 kDa and a band at ~60 kDa. The two bands may represent the two reported forms of this protein (522 and 530 amino acids).

#### REACTIVITY

Reactivity has been confirmed with human Hela, HEK293, Jurkat, and mouse NIH3T3 cell lysates.

Sample	Western Blotting	Immunoprecipitation (Native)
Human	+++	+++
Mouse	+++	ND

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)

#### **USAGE**

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Immunoprecipitation: 7 μg/reaction
Western Blotting: 1-3 μg/mL

#### STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

#### **BACKGROUND**

TRAFs (Tumor necrosis factor receptor-associated factors) are cytoplasmic adaptor proteins that associate with tumor necrosis factor receptors (TNFR), thus mediating tumor necrosis factor (TNF) induced signaling. The TRAF family consists of six members (TRAF1-6).<sup>1-3</sup> TRAF proteins play an important role in regulating cellular death and cellular response to stress by mediating stimulation of AP-1 family through activation of MAP kinases, including JNK/SAPKs, ERKs and p38s.<sup>4</sup> They are also involved in the regulation of inflammatory and anti-apoptotic responses through activation of the transcription factors of NF-kB.<sup>5</sup>

TRAF6 possesses several binding motifs in CD40, TRANCE-R and IRAK suggesting a crucial role in TRANCE-R signaling. It is involved in the activation of the anti-apoptotic serine/threonine kinase Akt/PKB through TRANCE-R. Due to its specific receptor-binding TRAF-C domain, TRAF6 is the only member of the TRAF family that also participates in signal transduction of the interlukin-1 receptor (IL-1R)/Toll-like receptor (TLR) superfamily. TRAF6 plays a crucial role in adaptive immunity, innate immunity, bone homeostasis, perinatal and postnatal survival, and cytokine signaling.

#### **REFERENCES**

- 1. Cao Z. et al. Nature 383:443-446, 1996.
- 2. Nakano H, et al. J Biol Chem 271:14661-14664, 1996.
- 3. Rothe M, et al. Cell 78:681-692,1994.
- 4. Karin M. Philos Trans R Soc Lond B Biol Sci 351:127-134, 1996
- 5. Darnay BG, et al. J Biol Chem 274:7724-7731, 1999.
- Wong BR, et al. Mol Cell 4:1041-1049, 1999.
- 7. Aderem A and Ulevitch RJ. Nature 406:782-787, 2000.
- 8. Chung JY, et al. *J Cell Sci* 115:679-688, 2002.
- 9. Ye H, et al. Nature 418:443-447, 2002.

#### **RELATED PRODUCTS**

Product	Conjugate	Cat. No.
Protein A	Sepharose <sup>®</sup> 4B	10-1041
rec-Protein G	Sepharose <sup>®</sup> 4B	10-1241

	ZyMAX™ Goat x Rabbit IgG	ZyMAX™ Goat x Mouse IgG
Conjugate	(H+L)	(H+L)
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Су™3	81-6115	81-6515
Су™5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

Zymed<sup>®</sup> and ZyMAX<sup>™</sup> are trademarks of Zymed Laboratories Inc. Cy<sup>™</sup> and Sepharose<sup>®</sup> are trademarks of Amersham Biosciences Ltd.

# For Research Use Only

MZ040310