

## EAPII (42C)

Type	Size	Catalog number
unconjugated	100µg	100101

<b>Antigen:</b>	EAPII (Synonyms: TDP2, TTRAP)
<b>Immunogen:</b>	Recombinant full-length protein
<b>Host/Isotype:</b>	Mouse, IgG2b, k
<b>Reactivity:</b>	Human
<b>Purity:</b>	>90% pure tested via polyacrylamide gel electrophoresis (PAGE)
<b>Formulation:</b>	PBS, pH7.2, 0.09%NaN <sub>3</sub>
<b>Storage:</b>	Store at 2-8°C for 12 months
<b>Applications:</b>	IHC/ICC, WB, IP, ChIP

### Antigen Information

EAPII (also called TTRAP, TDP2) originally was identified as an interacting partner of oncogene ETS1, a founding member of ets transcription factor family, and the cytoplasmic domain of CD40, a member of the tumor necrosis factor (TNF) receptor family. EAPII significantly represses ETS1 transcriptional activity and the synergistic transactivation by ETS1 and AP-1 or by ETS1 and NFκB. EAPII/TTRAP also inhibits the transcriptional activation of NFκB induced by CD40 or phorbol 12-myristate 13-acetate (PMA). Recently this protein was also proven to be the first 5'-tyrosyl-DNA phosphodiesterase. EAPII has been demonstrated to have promiscuous protein associations, broad responsiveness to various extracellular signals, and pleiotropic functions in the development of human diseases including cancer and neurodegenerative disease. Emerging data suggests that EAPII is a multi-functional protein: it repairs enzyme (topoisomerase)-mediated DNA damage by removing phosphotyrosine from DNA adducts. It is involved in multiple signal transduction pathways such as TNF-TNFR, TGFβ and MAPK, and responsive to immune defense including inflammatory response, viral infection and DNA toxins (chemo or radiation therapy). EAPII is predominantly localized in the nucleus but based on pathological conditions it also localizes in both cytoplasm and nucleus.

### References

1. Pei H, et al. 2003. Oncogene. 22:2699.
2. Pype S, et al. J Biol Chem 2000; 275:18586.
3. Cortes Ledesma F, et al. Nature 2009; 461:674
4. Li C, et al. 2011. Oncogene. 30:3802.
5. Li C, et.al. Cell Cycle. 2011; 10:3274
6. Do P, et al. 2012. Genes & Development. 26:830.

### Terms and Conditions

This product is for research use only (RUO) and not intended for diagnostic testing.