

Anti-TPL2 (pT290) Antibody
Rabbit polyclonal antibody to TPL2 (pT290)
Catalog # AP59989**Specification**

Anti-TPL2 (pT290) Antibody - Product Information

Application	WB, IF/IC, IHC
Primary Accession	P41279
Other Accession	Q07174
Reactivity	Human, Mouse, Rat, Monkey, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	52925

Anti-TPL2 (pT290) Antibody - Additional Information**Gene ID** 1326**Other Names**

COT; ESTF; Mitogen-activated protein kinase kinase kinase 8; Cancer Osaka thyroid oncogene; Proto-oncogene c-Cot; Serine/threonine-protein kinase cot; Tumor progression locus 2; TPL-2

Target/Specificity

Recognizes endogenous levels of TPL2 (pT290) protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500)

IF/IC~~N/A

IHC~~1:100~500

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-TPL2 (pT290) Antibody - Protein Information**Name** MAP3K8**Synonyms** COT, ESTF**Function**

Required for lipopolysaccharide (LPS)-induced, TLR4-mediated activation of the MAPK/ERK pathway in macrophages, thus being critical for production of the pro-inflammatory cytokine TNF-alpha (TNF) during immune responses. Involved in the regulation of T-helper cell differentiation and IFNG expression in T-cells. Involved in mediating host resistance to bacterial

infection through negative regulation of type I interferon (IFN) production. In vitro, activates MAPK/ERK pathway in response to IL1 in an IRAK1-independent manner, leading to up-regulation of IL8 and CCL4. Transduces CD40 and TNFRSF1A signals that activate ERK in B-cells and macrophages, and thus may play a role in the regulation of immunoglobulin production. May also play a role in the transduction of TNF signals that activate JNK and NF-kappa-B in some cell types. In adipocytes, activates MAPK/ERK pathway in an IKBKB- dependent manner in response to IL1B and TNF, but not insulin, leading to induction of lipolysis. Plays a role in the cell cycle. Isoform 1 shows some transforming activity, although it is much weaker than that of the activated oncogenic variant.

Cellular Location

Cytoplasm

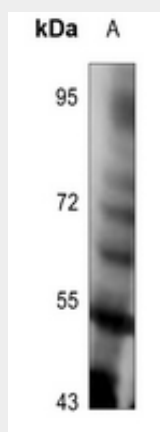
Tissue Location

Expressed in several normal tissues and human tumor-derived cell lines

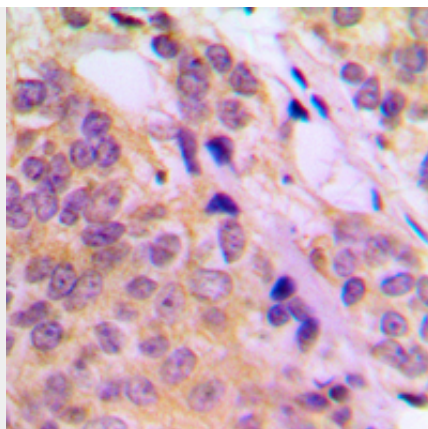
Anti-TPL2 (pT290) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

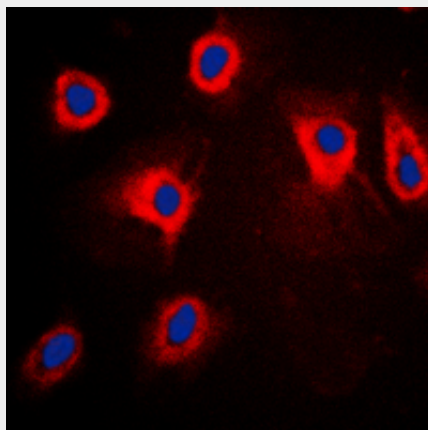
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-TPL2 (pT290) Antibody - Images

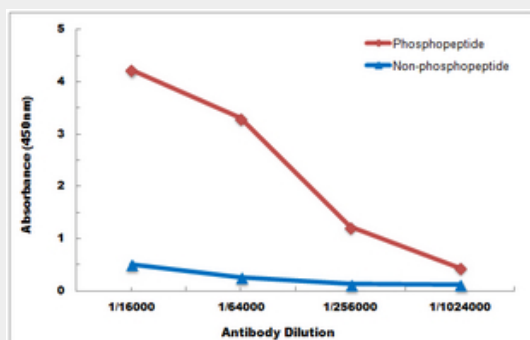
Western blot analysis of TPL2 (pT290) expression in SP20 (A) whole cell lysates.



Immunohistochemical analysis of TPL2 (pT290) staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of TPL2 (pT290) staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).



Direct ELISA antibody dose-response curve using Anti-TPL2 (pT290) Antibody. Antigen (phosphopeptide and non-phosphopeptide) concentration is 5 ug/ml. Goat Anti-Rabbit IgG (H&L) - HRP was used as the secondary antibody, and signal was developed by TMB substrate.

Anti-TPL2 (pT290) Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human TPL2 (pT290). The exact sequence is proprietary.