

## Product datasheet for **TA392946M**

### 14-3-3 theta (YWHAQ) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:500~1:1000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic phosphopeptide derived from human 14-3-3 $\theta/\tau$ around the phosphorylation site of Serine 232
Specificity:	14-3-3 $\theta/\tau$ (phospho-S232) polyclonal antibody detects endogenous levels of 14-3-3 $\theta/\tau$ protein only when phosphorylated at Ser232.
Formulation:	Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2
Concentration:	1mg/ml
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -22°C long term. Avoid freeze-thaw cycles.
Stability:	1 year
Predicted Protein Size:	~ 28 kDa
Gene Name:	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein theta
Database Link:	<a href="#">Entrez Gene 10971 Human P27348</a>



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**Background:**

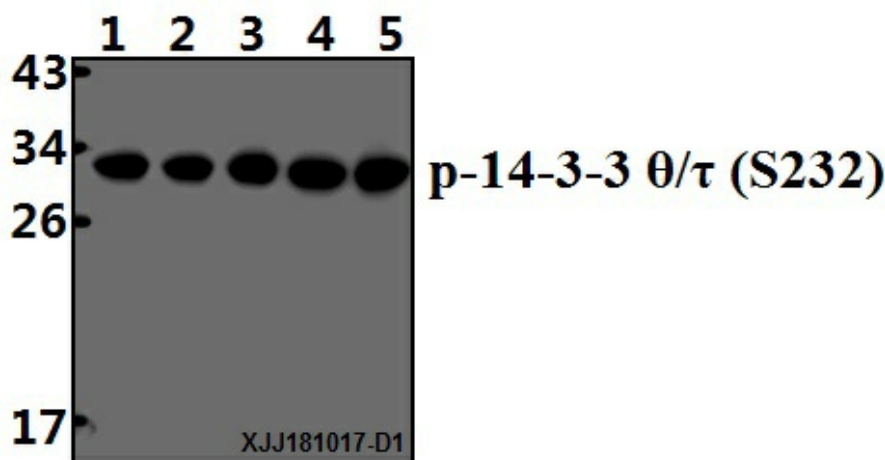
The 14-3-3 family of proteins plays a key regulatory role in signal transduction, checkpoint control, apoptotic and nutrient-sensing pathways. 14-3-3 proteins are highly conserved and ubiquitously expressed. There are at least seven isoforms,  $\beta$ ,  $\gamma$ ,  $\epsilon$ ,  $\sigma$ ,  $\zeta$ ,  $\tau$ , and  $\eta$  that have been identified in mammals. The initially described  $\alpha$  and  $\delta$  isoforms are confirmed to be phosphorylated forms of  $\beta$  and  $\zeta$ , respectively. Through their amino-terminal  $\alpha$  helical region, 14-3-3 proteins form homo- or heterodimers that interact with a wide variety of proteins: transcription factors, metabolic enzymes, cytoskeletal proteins, kinases, phosphatases, and other signaling molecules. The interaction of 14-3-3 proteins with their targets is primarily through a phospho-Ser/Thr motif. However, binding to divergent phospho-Ser/Thr motifs, as well as phosphorylation independent interactions has been observed. 14-3-3 binding masks specific sequences of the target protein, and therefore, modulates target protein localization, phosphorylation state, stability, and molecular interactions. 14-3-3 proteins may also induce target protein conformational changes that modify target protein function. Distinct temporal and spatial expression patterns of 14-3-3 isoforms have been observed in development and in acute response to extracellular signals and drugs, suggesting that 14-3-3 isoforms may perform different functions despite their sequence similarities. Several studies suggest that 14-3-3 isoforms are differentially regulated in cancer and neurological syndromes.

**Synonyms:**

14-3-3 protein T-cell; 14-3-3 protein tau; 14-3-3 protein theta; Protein HS1; YWHAQ

**Note:**

For research use only, not for use in diagnostic procedure.

**Product images:**


Western blot (WB) analysis of 14-3-3  $\theta/\tau$  (phospho-S232) polyclonal antibody at 1:500 dilution Lane1:A549 whole cell lysate(40 $\mu$ g) Lane2:Hela whole cell lysate(40 $\mu$ g) Lane3:The Brain tissue lysate of Rat(40 $\mu$ g) Lane4:HEK293T whole cell lysate(40 $\mu$ g) Lane5:CT-26 whole cell lysate(40 $\mu$ g)