

Taok 2 β

Cat.No. 395 003; Polyclonal rabbit antibody, 50 μ g specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 μ g specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 μ l H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining) IP: yes ICC: not tested yet IHC: not tested yet IHC-P/FFPE: not tested yet
Immunogen	Synthetic peptide corresponding to AA 1020 to 1041 from mouse Taok2-2 (UniProt Id: Q6ZQ29-2)
Reactivity	Reacts with: mouse (Q6ZQ29-2), rat (Q9JLS3-2). Other species not tested yet.
Specificity	Specific for Taok 2 β . (K.O. verified)

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

The serine/threonine-protein kinase **Taok 2** or TAO 2 plays a role in membrane blebbing and the formation of apoptotic bodies. Taok 2 is involved in the MAPK14/p38 MAPK stress-activated MAPK cascade. It may also affect the cytoskeleton organization and stability, the dendritic formation, and the osmotic stress-MAPK8 pathway. There are two isoforms, Taok 2 α and **Taok 2 β** , only the latter is required for PCDH8 endocytosis and CDH2 cointernalization.

Selected General References

TAOK2 Kinase Mediates PSD95 Stability and Dendritic Spine Maturation through Septin7 Phosphorylation. Yadav S, Osés-Prieto JA, Peters CJ, Zhou J, Pleasure SJ, Burlingame AL, Jan LY, Jan YN. *Neuron* (2017) 93(2): 379-393.

Autism spectrum disorder susceptibility gene TAO2 affects basal dendrite formation in the neocortex. de Anda FC, Rosario AL, Durak O, Tran T, Gräff J, Meletis K, Rei D, Soda T, Madabhushi R, Ginty DD, Kolodkin AL, et al. *Nature neuroscience* (2012) 15(7): 1022-31.

Prostate-derived sterile 20-like kinases (PSKs/TAOKs) are activated in mitosis and contribute to mitotic cell rounding and spindle positioning.

Wojtala RL, Tavares IA, Morton PE, Valderrama F, Thomas NS, Morris JD. *The Journal of biological chemistry* (2011) 286(34): 30161-70.

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Chen Z, Cobb MH. *The Journal of biological chemistry* (2001) 276(19): 16070-5.

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Chen Z, Hutchison M, Cobb MH. *The Journal of biological chemistry* (1999) 274(40): 28803-7.