

Erk 1/2 (pThr188) pAb

Quality Control Certificate of Analysis

Catalogue No.: A010-40AP

Unit Size: 100 µg

Lot No: A642223

Background: The extracellular-regulated kinases - Erk1 and Erk2 are widely expressed protein kinases which are activated by mitogen-activated protein kinase 1 and 2 (MEK1/2) via phosphorylation of the TEY motif in the activation loop (Lorenz et al., 2009). Erk1/2 may become autophosphorylated at position Thr-188 and this is a marker of cardiac hypertrophy. Antibody A010-40AP recognises Erk2 and Erk2 phosphorylated at Thr-188.

Description: Lyophilised **Rabbit** polyclonal protein A affinity purified antibody (A010-40AP)

Immunogen: HPLC purified peptide LTEYVAT(PO₃H₂)RWYR-NH₂ conjugated to KLH using glutaraldehyde

Antibody Isotype: IgG.

Antibody Purity: Protein A Affinity Purified

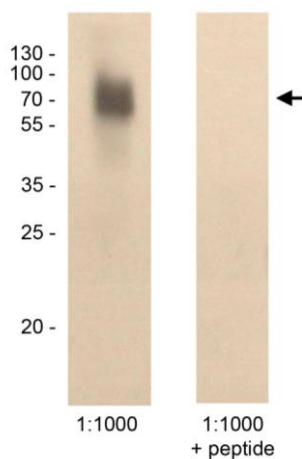
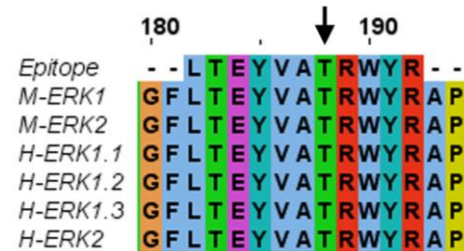
Specificity: Epitope peptide is identical in all isoforms of ERK1 (MAPK3) and ERK2 (MAPK1)

Species Cross Reactivity: Peptide aligns with sequence from both Mouse and Human. Threonine 188 is number in relation to the mouse sequence of ERK2.

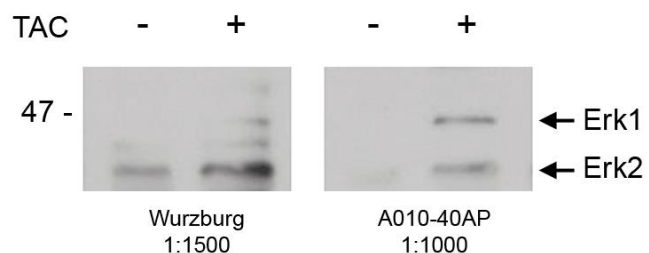
Vial Constituents: Lyophilised A010-40AP Rabbit antibody (100 µg) in 0.1M Tris-citrate pH 7.4 with 20%v/v stabiliser solution

Storage Instructions: Lyophilised antibody is stable at 4 °C when stored with desiccant. Reconstitute lyophilised powder in 100 µl of 18 MΩ H₂O for a 1mg/ml solution with stable buffering conditions. Aliquot and store frozen at -80 °C for 1 year. Avoid freeze - thaw cycles.

Tested Applications: WB 1:1000 PO₃H₂ Specific



WB using Erk1/2 PT188 Ab against 0.25 µg of BSA conjugated phospho-peptide. Ab binding is blocked by epitope phosphopeptide (1µM: P010-40) in right hand panel



WB comparing Erk1/2 PT188 antibodies Würzburg (Lorenz et al., 2008) and Badrilla Against Heart lysates from mice +/- Transverse Aorta Constricted (TAC)

Related Products: P010-40

Background References:

- Lorenz, K., Schmitt, J. P., Schmitteckert, E. M., and Lohse, M. J. (2009) A new type of ERK1/2 autophosphorylation causes cardiac hypertrophy. *Nat Med* **15**, 75-83
- Vidal, M., Wieland, T., Lohse, M. J., and Lorenz, K. (2012) β-Adrenergic receptor stimulation causes cardiac hypertrophy via a Gβγ/Erk-dependent pathway. *Cardiovasc Res* **96**, 255-264