

Anti-Phospho-Gap-43 (Ser41) Antibody

Catalog Number: P01868

About GAP43

Gap-43 is thought to have an important role in development and plasticity because it is expressed at high levels in neuronal growth cones during development and during axonal regeneration (Benowitz and Routtenberg, 1997). There is also evidence from knockout animals that Gap-43 serves to amplify pathfinding signals from the growth cone (Strittmatter et al., 1995). Gap-43 is thought to mediate at least some of these effects via interaction with actin. Importantly, phosphorylation at Ser-41 by protein kinase C (Catalog No. 1609-PKC) modulates the interaction of Gap-43 with actin (He et al., 1997) and may also affect neurotransmitter release during forms of plasticity like LTP (Hulo et al., 2002).

Overview

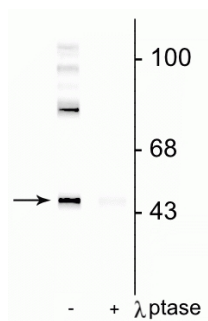
Product Name	Anti-Phospho-Gap-43 (Ser41) Antibody
Reactive Species	Mouse, Rat
Description	Boster Bio Anti-Phospho-Gap-43 (Ser41) Antibody (Catalog # P01868). Tested in WB applications. This antibody reacts with Mouse, Rat.
Application	WB
Clonality	Polyclonal 608
Formulation	10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50% glycerol.
Storage Instructions	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C. After date of receipt, stable for at least 1 year at -20°C.
Host	Rabbit
Uniprot ID	P07936

Technical Details

Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser41 of rat GAP43, conjugated to keyhole limpet hemocyanin (KLH). Immunogen species is Rat.
Predicted Reactive Species	Bovine, Canine, Chicken, Human, Primate, Xenopus, Zebrafish
Cross Reactivity	No cross reactivity with other proteins.
Isotype	IgG
Form	Liquid
Concentration	0.5-1mg/ml, actual concentration vary by lot. Use suggested dilution ratio to decide dilution procedure.

Purification	Prepared from pooled rabbit serum by affinity purification via sequential chromatography on phospho and non-phosphopeptide affinity columns.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>WB: 1:1000</p>

Anti-Phospho-Gap-43 (Ser41) Antibody (P01868) Images



Western blot of rat cortical lysate showing specific immunolabeling of the ~50 kDa Gap-43 protein phosphorylated at Ser⁴¹ in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is completely eliminated by blot treatment with lambda phosphatase (gamma-Ptase, 1200 units for 30 min).

4 Publications Citing This Product

1. PubMed ID: 26136892, Fructus Corni extract-induced neuritogenesis in PC12 cells is associated with the suppression of stromal interaction molecule 1 expression and inhibition of Ca²⁺ influx
2. PubMed ID: 28054637, Liu H, Lv P, Zhu Y, Wu H, Zhang K, Xu F, Zheng L, Zhao J. Sci Rep. 2017 Jan 5;7:39869. doi: 10.1038/srep39869. Salidroside promotes peripheral nerve regeneration based on tissue engineering strategy using Schwann cells and PLGA: in vitro and in vivo
3. PubMed ID: 29707580, Liu Z, Liu H, Zeng ZH. Biomed Res Int. 2018 Mar 7;2018:8697913. doi: 10.1155/2018/8697913. eCollection 2018. Chronic Unpredictable Mild Stress Causing Cardiac and Thoracic Spinal Cord Electrophysiological Abnormalities May Be Associated with Incre...

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