SPAK polyclonal antibody

Catalog: BS62488 Host: Rabbit Reactivity: Human,Mouse,Rat

BackGround:

SPAK (STE20/SPS1-related Pro/Ala-rich kinase) and OSR1 (oxidative stress responsive 1) are members of the GCK family serine/threonine kinases. Overexpression and in vitrostudies demonstrate that SPAK is able to activate p38 MAP kinase indicating a possible role for SPAK in the stress response. Yeast two-hybrid screening revealed that SPAK and OSR1 bind to Na-K-2Cl cotransporters NKCC1 and NKCC2 and K-Cl cotransporter KCC3. WNK1 and WNK4 phosphorylate SPAK at Thr243/247 and Ser380. Similarly, WNK1 and WNK4 phosphorylate OSR1 at Thr185 and Ser315. Phosphorylation at these sites stimulates SPAK and OSR1 activity, leading to NKCC1 phosphorylation and enhanced NKCC1 activity. SPAK is also phosphorylated at Ser311 by PKCθ in response to T cell activation. Substitution of Ser311 with Ala or specific siRNA knock-down of SPAK dramatically reduces TCR/CD28-induced AP-1 activation, suggesting SPAK is involved in T cell signaling as well.

Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

Molecular Weight:

~ 70 kDa

Swiss-Prot:

Q9UEW8

Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

Applications:

WB:1:500~1:1000 IHC:1:50~1:200

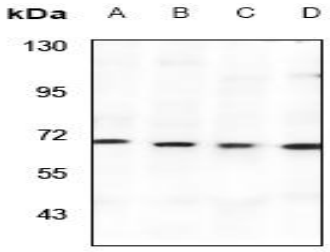
Storage&Stability:

Store at 4℃ short term. Aliquot and store at -20℃ long term. Avoid freeze-thaw cycles.

Specificity:

SPAK polyclonal antibody detects endogenous levels of SPAK protein.

DATA:



Western blot (WB) analysis of SPAK polyclonal antibody at 1:500 dilution

LaneA:CT26 whole cell lysate

LaneB:PC12 whole cell lysate

LaneC:A549 whole cell lysate

LaneD:MCF-7 whole cell lysate

Note:

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

Bioworld Technology, Inc.
Add: 1660 South Highway 100, Suite 500 St. Louis Park, MN 55416,USA.
Email: info@bioworlde.com
Tel: 6123263284
Fax: 6122933841

Bioworld technology, co. Ltd.
Add: No 9, weidi road Qixia District Nanjing, 210046, P. R. China.
Email: info@biogot.com
Tel: 0086-025-68037686
Fax: 0086-025-68035151