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Phosphothreonine Antibody
Catalog # ASM10404

Specification

Phosphothreonine Antibody - Product Information

Application	ICC/IF, WB
Host	Rabbit
Reactivity	Species Independent
Clonality	Polyclonal

Description
Rabbit Anti-Phosphothreonine Polyclonal

Target/Specificity
Detects proteins phosphorylated on threonine residues. Does not cross-react with phosphotyrosine.

Other Names
Phospho-threonine Antibody

Immunogen
Phosphothreonine conjugated to KLH

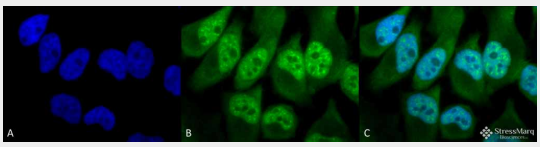
Purification
Protein A Purified

Storage	-20ºC

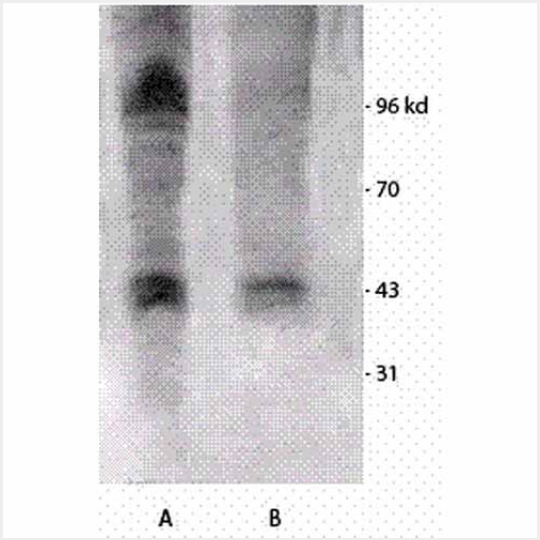
Storage Buffer
PBS, 50% glycerol, 0.09% sodium azide

Shipping Temperature	Blue Ice or 4ºC

Certificate of Analysis
2 µg/ml of SPC-154 was sufficient for detection of phosphorylation signal in western blot analysis using mouse spleen extract treated with Vanadium.



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-Phosphothreonine Polyclonal Antibody (ASM10404). Tissue: HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-Phosphothreonine Polyclonal Antibody (ASM10404) at 1:60 for 12 hours at 4°C. Secondary Antibody: FITC Goat Anti-Rabbit (green) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Cytoplasm. Nucleus. Magnification: 100x. (A) DAPI (blue) nuclear stain. (B) Anti-Phosphothreonine Antibody. (C) Composite.



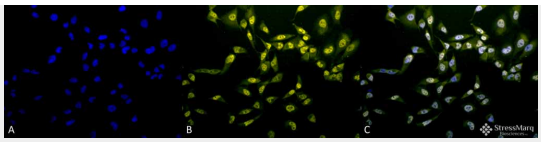
Western blot analysis of Mouse brain cell lysates showing detection of Phosphothreonine protein using Rabbit Anti-Phosphothreonine Polyclonal Antibody (ASM10404). Primary Antibody: Rabbit Anti-Phosphothreonine Polyclonal Antibody (ASM10404) at 1:1000. Left: Treated with Vanadium, Right: Non-treated..

Phosphothreonine Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence

- Immunoprecipitation
- Flow Cytomety
- Cell Culture



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-Phosphothreonine Polyclonal Antibody (ASM10404). Tissue: HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-Phosphothreonine Polyclonal Antibody (ASM10404) at 1:60 for 12 hours at 4°C. Secondary Antibody: R-PE Goat Anti-Rabbit (yellow) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Cytoplasm. Nucleus. Magnification: 20x. (A) DAPI (blue) nuclear stain. (B) Anti-Phosphothreonine Antibody. (C) Composite.

Phosphothreonine Antibody - Background

Protein phosphorylation is an important posttranslational modification that serves many key functions to regulate a protein's activity, localization, and protein-protein interactions. Phosphorylation is catalyzed by various specific protein kinases, which involves removing a phosphate group from ATP and covalently attaching it to to a recipient protein that acts as a substrate. Most kinases act on both serine and threonine; others act on tyrosine, and a number (dual specificity kinases) act on all three. Because phosphorylation can occur at multiple sites on any given protein, it can therefore change the function or localization of that protein at any time (1). Changing the function of these proteins has been linked to a number of diseases, including cancer, diabetes, heart disease, inflammation and neurological disorders (2-4).

Phosphothreonine Antibody - References

1. Goto H. et al. (2005) Nature Cell Biology 8: 180-187.
2. Blume-Jensen P. and Hunter T. (2001) Nature 411: 355-365.
3. Downward J. (2001) Nature 411: 759-762.
4. Pawson T. and Saxton T.M. (1999) Cell 97: 675-678.
5. Ostrovsky P.C. (1995) Genes Dev. 9(16):

2034-2041.