# **Anti-N-WASP (S484/S485)**, phospho-specific [WASP (S483/S484)]

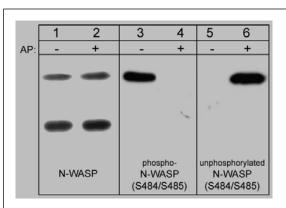
Cat. # **WP2201** 

Host Rabbit Polyclonal

Size 100μl

#### **Background:**

Members of the Wiskott-Aldrich sydrome protein (WASP) family regulate the formation of actin-based cell structures in many cell types. These proteins contain C-terminal actinbinding domains that can stimulate actin polymerization. In addition, these proteins bind the ARP2/3 complex, which can nucleate actin polymerization at sites that lead to branched actin structures. WASP is expressed primarily in hematopoietic cells, while its homolog N-WASP is widely expressed. These proteins have 48% identity in human with the highest homology in the functional regions of these proteins. Phosphorylation regulates the activity of both proteins. Dual phosphorylation of WASP on serine 483 and 484 by casein kinases increase the affinity for the ARP2/3 complex. Thus, dual serine phosphorylation may be important for formation of actin-based structures in various cell types.



Western blot analysis of control and alkaline phosphatase-treated (AP) neonatal rat brain lysate (20  $\mu$ g/lane). Blots were probed with anti-N-WASP (Lanes 1 & 2), anti-phospho-N-WASP (S484/S485) (Lanes 3 & 4), or anti-unphosphorylated-N-WASP (S484/S485) (Lanes 5 & 6).

# **References:**

Higgs, H.N. & Pollard, T.D. (2001) Annu Rev Biochem 70:649-676. Cory, G.O. et al. (2003) Mol Cell 11(5):1229-39.

#### Immunogen:

Phospho-N-WASP (S484/S485) synthetic peptide (coupled to KLH) corresponding to amino acid residues around serine 484 and 485 of human N-WASP. The human WASP sequence has a similar peptide sequence surrounding serine 483 and 484.

## **Buffer and Storage:**

Rabbit polyclonal, affinity-purified antibody is supplied in 100μl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at –20°C. Do not aliquot. Stable for 1 year.

## **Applications:**

Western blotting 1:1000 dilution<sup>†</sup>
ELISA 1:2000 dilution

End user should determine optimal dilution for their particular applications and experiments.

<sup>†</sup>Membrane was incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1hour at room temperature.

# **Specificity:**

This antibody was cross-adsorbed to unphosphorylated-N-WASP (S484/S485) peptide (without carrier) then affinity purified using phospho-N-WASP (S484/S485) peptide (without carrier). The antibody detects a 63 kDa\* protein corresponding to the molecular mass of phosphorylated WASP on SDS-PAGE immunoblots of Jurkat cell lysate. In rat brain, A431, human endothelial and SKN-SH cells, this antibody detects a 65 kDa\* protein corresponding to phosphorylated N-WASP.

\*All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot mobilities of known proteins with similar MW.

#### **Related Products:**

WP2401 unphosphorylated N-WASP (S484/S485) (WASP (S483/S484)) Rabbit Polyclonal

WP2601 N-WASP (Tyr-256), phospho-specific Rabbit Polyclonal

WP2001 N-WASP Rabbit Polyclonal WP2101 WASP/N-WASP Rabbit Polyclonal WX2405 nonphospho-N-WASP (S484/S485) Peptide WX2205 phospho-N-WASP (S484/S485) Peptide

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