

# N-WASP (Ser-484/Ser-485), phospho-specific

Cat. # WP2201

Host Rabbit Polyclonal

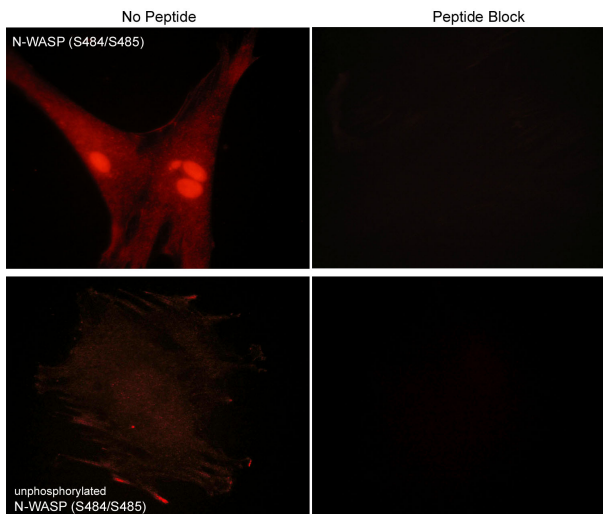
Size 100 µl

## Background:

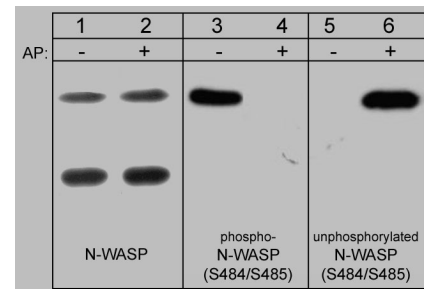
Members of the Wiskott-Aldrich syndrome protein (WASP) family regulate the formation of actin-based cell structures in many cell types. These proteins contain C-terminal actin-binding domains that can stimulate actin polymerization. In addition, these proteins bind the ARP2/3 complex, which can nucleate 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.

## 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.



Immunocytochemical labeling of phosphorylated and unphosphorylated N-WASP in rabbit spleen fibroblasts. The cells were probed with N-WASP (Ser-484/Ser-485) phospho-specific and N-WASP (Ser-484/Ser-485) unphosphorylated antibodies, then the antibodies were detected using appropriate secondary antibodies conjugated to Cy3. The antibodies were used in the absence (left) or presence (right) of their respective blocking peptide (WX2205 or WX2405).



Western blot analysis of control and alkaline phosphatase-treated (AP) neonatal rat brain lysate (20 µg/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).

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web: [www.ecmbiosciences.com](http://www.ecmbiosciences.com)

telephone: 859-879-2075

email: [info@ecmbiosciences.com](mailto:info@ecmbiosciences.com)

toll-free: 1-800-859-8202

# N-WASP (Ser-484/Ser-485), phospho-specific

**Cat. #** WP2201  
**Host** Rabbit Polyclonal  
**Size** 100 µl

## **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:**

WB 1:1000  
ELISA 1:2000  
ICC 1:50

End user should determine optimal dilution for their particular applications and experiments.  
Western blot membranes were 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 then affinity purified using phospho-N-WASP (S484/S485) peptide. 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 (Ser-484/Ser-485) Rabbit Polyclonal  
WP2601 N-WASP (Tyr-256), phospho-specific Rabbit Polyclonal  
WP2001 N-WASP Rabbit Polyclonal  
WX2405 unphosphorylated N-WASP (Ser-484/Ser-485) Peptide  
WP2101 WASP / N-WASP Rabbit Polyclonal  
WX2205 phospho-N-WASP (Ser-484/Ser-485) Peptide

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