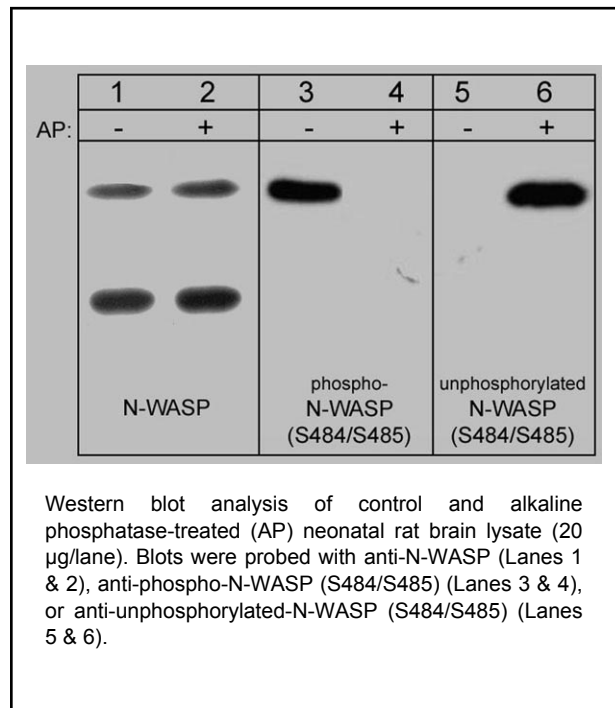


### Background

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. Serine and tyrosine phosphorylation regulates the activity of both proteins. WASP is observed as a 63 kDa protein in hematopoietic cells, while N-WASP is observed as a 65 kDa in many tissues, especially brain.



### Background References

Baba, Y. et al. (1999) *Blood* 93:2003.  
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.

### Applications

WB 1:1000  
ELISA 1:2000

### Species Reactivity

Hu, Rt, Ms

### Specificity

This antibody detects a 65 kDa\* protein corresponding to the molecular mass of N-WASP on SDS-PAGE immunoblots of neonatal rat brain lysate. It also detects 65 kDa\* proteins in A431, human endothelial, and SKN-SH cells. It does not recognize the 63 kDa\* WASP protein in Jurkat cell lysate.

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 1 hour at room temperature.

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

### Immunogen

Uniprot ID: O00401

N-WASP synthetic peptide (coupled to KLH) corresponding to amino acid residues in the N-terminal region of human N-WASP. This N-WASP peptide sequence is 100% homologous to rat and mouse N-WASP, and has low homology to the corresponding region in the human WASP.

### 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. Stable for 1 year.

### Related Products

AK6670 Arp2/3 Complex Antibody Sampler Kit  
WP2101 WASP / N-WASP Rabbit Polyclonal  
WP2601 N-WASP (Tyr-256), phospho-specific Rabbit Polyclonal  
WP2201 N-WASP (Ser-484/Ser-485), phospho-specific Rabbit Polyclonal  
WP2401 unphosphorylated N-WASP (Ser-484/Ser-485) Rabbit Polyclonal

### Product References

Elias, BC et al. (2015) *J Cell Sci*. 128(23):4293.  
WB: mouse kidney duct cells  
Kalwa, H. & Michel, T. (2011) *J Biol Chem* 286:2320.  
WB: bovine aortic endothelial cells  
Pichot, C. et al. (2010) *Cancer Res*. 70:8347.  
WB: human MDA-MB-231 cells

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