

#2145 Store at -20C

## NSF Antibody



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB, IP	H M R Hm Mk	Endogenous	78	Rabbit	#P46459	4905

### Product Usage Information

#### Application

Western Blotting  
Immunoprecipitation

#### Dilution

1:1000  
1:50

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

### Specificity / Sensitivity

NSF Antibody detects endogenous levels of total NSF protein.

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu524 of human NSF. Antibodies are purified by protein A and peptide affinity chromatography.

### Background

Several protein-protein interactions are essential to membrane fusion during endocytosis. Membrane fusion requires interaction among SNARE1 proteins associated with both donor and acceptor membranes (1,2). Following membrane fusion, the  $\alpha$ -SNAP cytoplasmic adapter protein binds to the SNARE complex. N-ethylmaleimide-sensitive factor (NSF), a hexameric ATPase, then associates with the  $\alpha$ -SNAP/SNARE complex to mediate SNARE disassembly during membrane fusion (3,4). The ATPase activity of NSF induces a conformational change in the  $\alpha$ -SNAP/SNARE complex that leads to its dissociation from the membrane, membrane fusion and eventual recycling of the SNARE complex for subsequent membrane fusion (3,4).

### Background References

1. Ungermann, C. and Langosch, D. (2005) *J Cell Sci* 118, 3819-28.
2. Leabu, M. (2006) *J Cell Mol Med* 10, 423-7.
3. May, A.P. et al. (2001) *J Biol Chem* 276, 21991-4.
4. Dalal, S. et al. (2004) *Mol Biol Cell* 15, 637-48.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

### Applications Key

**WB:** Western Blotting **IP:** Immunoprecipitation

### Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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