

NSF Antibody

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, 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 α -SNAP cytoplasmic adapter protein binds to the SNARE complex. N-ethylmaleimide-sensitive factor (NSF), a hexameric ATPase, then associates with the α -SNAP/SNARE complex to mediate SNARE disassembly during membrane fusion (3,4). The ATPase activity of NSF induces a conformational change in the α -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

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Hm:** Hamster **Mk:** Monkey

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