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## NSF (D31C7) XP<sup>®</sup> Rabbit mAb

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

<b>Applications:</b> W, IP, IF-F	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 78	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #P46459	<b>Entrez-Gene Id:</b> 4905
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Product Usage Information	Application	Dilution
	Western Blotting	1:1000
	Immunoprecipitation	1:100
	Immunofluorescence (Frozen)	1:100
<b>Storage</b>	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.	
<b>Specificity/Sensitivity</b>	NSF (D31C7) XP <sup>®</sup> Rabbit mAb detects endogenous levels of total NSF protein.	
<b>Source / Purification</b>	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu524 of human NSF protein.	
<b>Background</b>	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).	
<b>Background References</b>	<ol style="list-style-type: none"> <li>1. Ungermann, C. and Langosch, D. (2005) <i>J Cell Sci</i> 118, 3819-28.</li> <li>2. Leabu, M. (2006) <i>J Cell Mol Med</i> 10, 423-7.</li> <li>3. May, A.P. et al. (2001) <i>J Biol Chem</i> 276, 21991-4.</li> <li>4. Dalal, S. et al. (2004) <i>Mol Biol Cell</i> 15, 637-48.</li> </ol>	

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	<b>IMPORTANT:</b> 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.
<b>Applications Key</b>	<b>W:</b> Western Blotting <b>IP:</b> Immunoprecipitation <b>IF-F:</b> Immunofluorescence (Frozen)
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