10320 Camino Santa Fe, Suite G
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NSF Antibody

Affinity purified rabbit polyclonal antibody
Catalog # AN1110

Specification

NSF Antibody - Product Information

Application	**IHC, WB, FC**
Primary Accession	Q9QUL6
Reactivity	**Rat**
Predicted	**Human, Mouse**
Host	**Rabbit**
Clonality	**polyclonal**
Calculated MW	**75 KDa**

NSF Antibody - Additional Information

Gene ID	**60355**
Gene Name	**NSF**

Other Names
Vesicle-fusing ATPase, N-ethylmaleimide-sensitive fusion protein, NEM-sensitive fusion protein, Vesicular-fusion protein NSF, Nsf, Erg1

Target/Specificity
Synthetic peptide corresponding to amino acid residues from the C-terminal region conjugated to KLH.

Dilution
IHC~~1:500
WB~~ 1:1000
FC~~1:500

Format
Prepared from rabbit serum by affinity purification via chromatography on an affinity column made with the C-terminal peptide used as antigen.

Antibody Specificity
Specific for ~75k NSF protein.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
NSF Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

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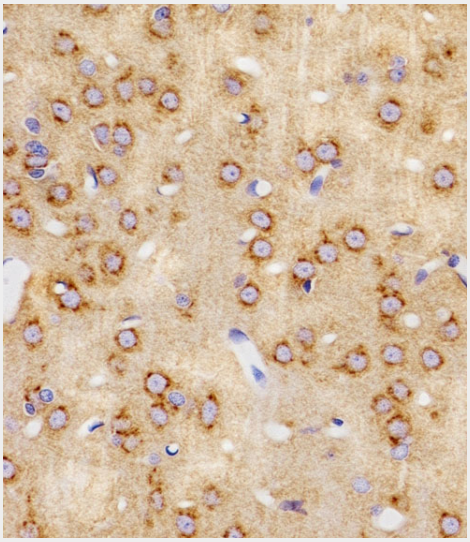
NSF Antibody - Protocols

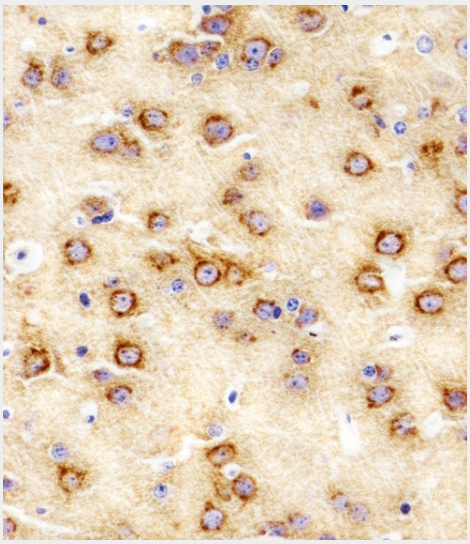
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NSF Antibody - Images



Immunohistochemical analysis of paraffin-embedded R. brain section using NSF Antibody (Cat#AN1110). AN1110 was diluted at 1:500 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



Immunohistochemical analysis of paraffin-embedded M. brain section using NSF Antibody (Cat#AN1110). AN1110 was diluted at 1:500 dilution. A peroxidase-conjugated goat anti-rabbit

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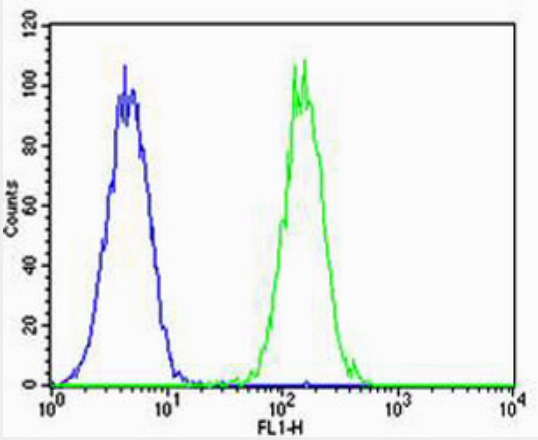
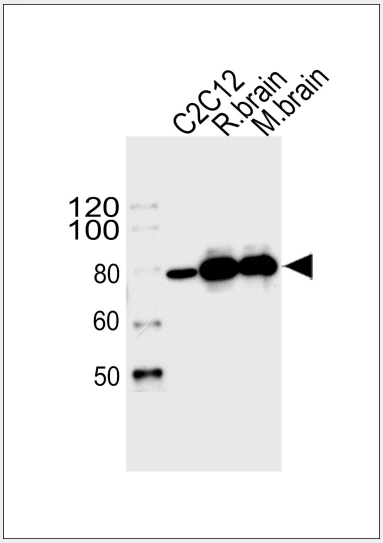
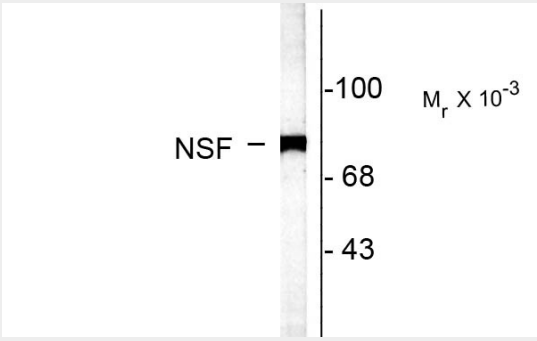
IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



Flow cytometric analysis of PC-12 cells using Park7 (DJ-1) Antibody(green, Cat#AN1110) compared to an isotype control of rabbit IgG(blue). AN1110 was diluted at 1:500 dilution. An Alexa Fluor® 488 goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody.



Western blot analysis of lysates from mouse C2C12 cell line, rat brain and mouse brain tissue lysate(from left to right), using Nsf Antibody(Cat. #AN1110). AN1110 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



Western blot of rat caudate lysate showing specific labeling of the~75k NSF protein.

NSF Antibody - Background

NSF (N-ethylmaleimide sensitive fusion protein) is a critical component of the SNARE (soluble NSF attachment protein receptors) protein complex that is involved in synaptic vesicle trafficking. Specifically, NSF has been found to be essential in membrane fusion. Furthermore, NSF has been recently demonstrated to bind other protein complexes such as AMPA receptor subunits (GluR2), GATE-16, LMA-1 and Rabs suggesting a more diverse role in the assembly of various protein complexes (Whiteheart et al., 2004).

NSF Antibody - References

Schweizer FE, Dresbach T, DeBello WM, O'Connor V, Augustine G, Betz H (1998) Regulation of neurotransmitter release kinetics by NSF. Science 279(5354):1203-1206.
Matveeva EA, Whitehart SW, Vanaman T, Slevin J (2001) Phosphorylation of the N-ethylmaleimide sensitive factor is associated with depolarization-dependent neurotransmitter release from synaptosomes. J Biol.Chem. 276(15): 12174-12181.
Whitehart SW, Matveeva EA (2004) Multiple binding proteins suggest diverse functions for the N-ethylmaleimide sensitive factor. J Struct. Biol.146(1-2): 32-43.