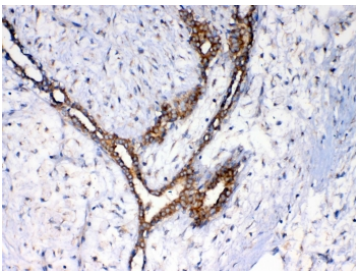


NSF Antibody / Vesicle-fusing ATPase (RQ4040)

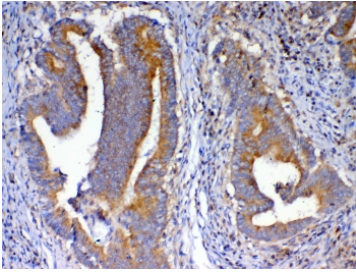
Catalog No.	Formulation	Size
RQ4040	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

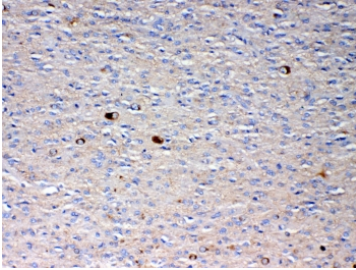
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P46459
Localization	Cytoplasmic
Applications	Western Blot : 0.5-1ug/ml IHC (FFPE) : 1-2ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This NSF antibody is available for research use only.



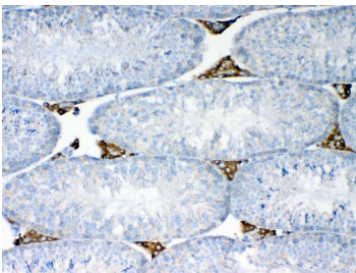
IHC testing of FFPE human breast cancer tissue with NSF antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



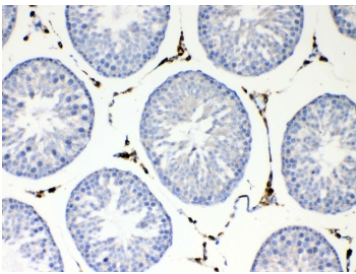
IHC testing of FFPE human intestinal cancer tissue with NSF antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



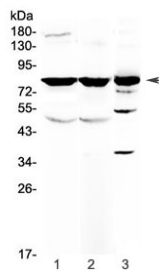
IHC testing of FFPE human glioma with NSF antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



IHC testing of FFPE mouse testis tissue with NSF antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



IHC testing of FFPE rat testis tissue with NSF antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



Western blot testing of 1) rat brain, 2) mouse brain and 3) human HepG2 antibody at 0.5ug/ml. Predicted molecular weight ~82 kDa.

Description

N-ethylmaleimide-sensitive factor, also known as NSF, is an enzyme which in humans is encoded by the NSF gene. NSF is a homohexameric AAA ATPase involved in membrane fusion. NSF is ubiquitously found in the cytoplasm of eukaryotic cells. It is a central component of the cellular machinery in the transfer of membrane vesicles from one membrane compartment to another. During this process, SNARE proteins on two joining membranes (usually a vesicle and a target membrane such as the plasma membrane) form a tight complex. This aids fusion of the vesicle with the target membrane. It has been proposed that the role of NSF is to undo these SNARE complexes once membrane fusion has occurred, using the hydrolysis of ATP as an energy source, allowing the dissociated SNAREs to be recycled for reuse in further rounds of membrane fusion. This proposal remains controversial, however. Recent work indicates that the ATPase

function of NSF does not function in recycling of vesicles but rather functions in the act of fusing vesicles with the plasma membrane.

Application Notes

Optimal dilution of the NSF antibody should be determined by the researcher.

Immunogen

A recombinant human partial protein corresponding to amino acids N620-D744 was used as the immunogen for the NSF antibody.

Storage

After reconstitution, the NSF antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.