SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-NF2 antibody

SL1366R

Product Name:	NF2
Chinese Name:	2型神经纤维瘤抗体
Alias:	neurofibromatosis type 2; CAN; BANF; bilateral acoustic neuroma; moesin ezrin radixin like protein; Moesin ezrin radizin like protein; merlin; Neurofibromatosis 2; ACN; Bilateral acoustic neuroma; MERL_HUMAN; Merlin; Moesin ezrin radizin like; Moesin-ezrin-radixin-like protein; Neurofibromatosis type 2; Neurofibromin-2; NF 2; Nf2; Neurofibromatosis2; Neurofibromin 2; Neurofibromin2; Schwannomerlin; NF-2; SCH; Schwannomin.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,.
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	70kDa
Cellular localization:	The nucleusThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human NF2:401-550/590
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Neurofibromin 2 (NF2) is a tumor suppressor gene encoding the protein Merlin. Merlin is closely related to the ERM (ezrin, radixin, moesin) family of proteins. The precise

	funtion of Merlin is not clear. It is thought to provide a link between the actin cytoskeleten and membrane associated proteins, playing a role in transduction of extracellular signals. It has been implicated in cell proliferation and cellular motility. Mutations in the NF2 gene cause neurofibromatosis type II, a condition characterised by the development of tumors in the central nervous system. **Function:** Probable regulator of the Hippo/SWH (Sav/Wts/Hpo) signaling pathway, a signaling pathway that plays a pivotal role in tumor suppression by restricting proliferation and promoting apoptosis. Along with WWC1 can synergistically induce the phosphorylation of LATS1 and LATS2 and can probably function in the regulation of the Hippo/SWH (Sav/Wts/Hpo) signaling pathway. May act as a membrane stabilizing protein. May inhibit PI3 kinase by binding to AGAP2 and impairing its stimulating activity. Suppresses cell proliferation and tumorigenesis by inhibiting the CUL4A-RBX1-DDB1-VprBP/DCAF1 E3 ubiquitin-protein ligase complex. **Subunit:** Interacts with SLC9A3R1, HGS and AGAP2. Interacts with LAYN (By similarity). Interacts with SGSM3. Interacts (via FERM domain) with MPP1. Interacts with WWC1. Interacts with the CUL4A-RBX1-DDB1-VprBP/DCAF1 E3 ubiquitin-protein ligase complex. The unphosphorylated form interacts (via FERM domain) with VPRBP/DCAF1. **Subcellular Location:** Isoform 1: Cell projection, filopodium membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, ruffle membrane; Peripheral membrane protein; Cytoplasmic side. Nucleus. Note=In a fibroblastic cell line, isoform 1 is found homogeneously distributed over the entire cell, with a particularly strong staining in ruffling membranes and filopodia. Colocalizes with MPP1 in non-myelin-forming Schwann cells. Binds with VPRBP in the nucleus. The intramolecular association of the FERM domain with the C-terminal tail promotes nuclear accumulation. The unphosphorylated form accumulates predominantly in the nucleus while the phosphorylated form is largely confined to the non-nuclear fractions. Isoform 7: Cytoplasm, perinuclear region. Cytoplasmic granule. Note=Observed in cytoplasmic granules concentrated in a perinuclear location. Isoform 7 is absent from ruffling membranes and filopodia. Isoform 9: Cytoplasm, perinuclear region. Cytoplasmic granule. Note=Observed in cytoplasmic granules concentrated in a perinuclear location. Isoform 9 is absent from ruffling membranes and filopodia. Isoform 10: Nucleus. Cell projection, filopodium membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, ruffle membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasm, perinuclear region. Cytoplasmic granule. Cytoplasm, cytoskeleton. Note=In a fibroblastic cell line, isoform 10 is found homogeneously distributed over the entire cell, with a particularly strong staining in ruffling membranes and filopodia.

Tissue Specificity:
Widely expressed. Isoform 1 and isoform 3 are predominant. Isoform 4, isoform 5 and isoform 6 are expressed moderately. Isoform 8 is found at low frequency. Isoform 7, isoform 9 and isoform 10 are not expressed in adult tissues, with the exception of adult retina expressing isoform 10. Isoform 9 is faintly expressed in fetal brain, heart, lung, skeletal muscle and spleen. Fetal thymus expresses isoforms 1, 7, 9 and 10 at similar levels.

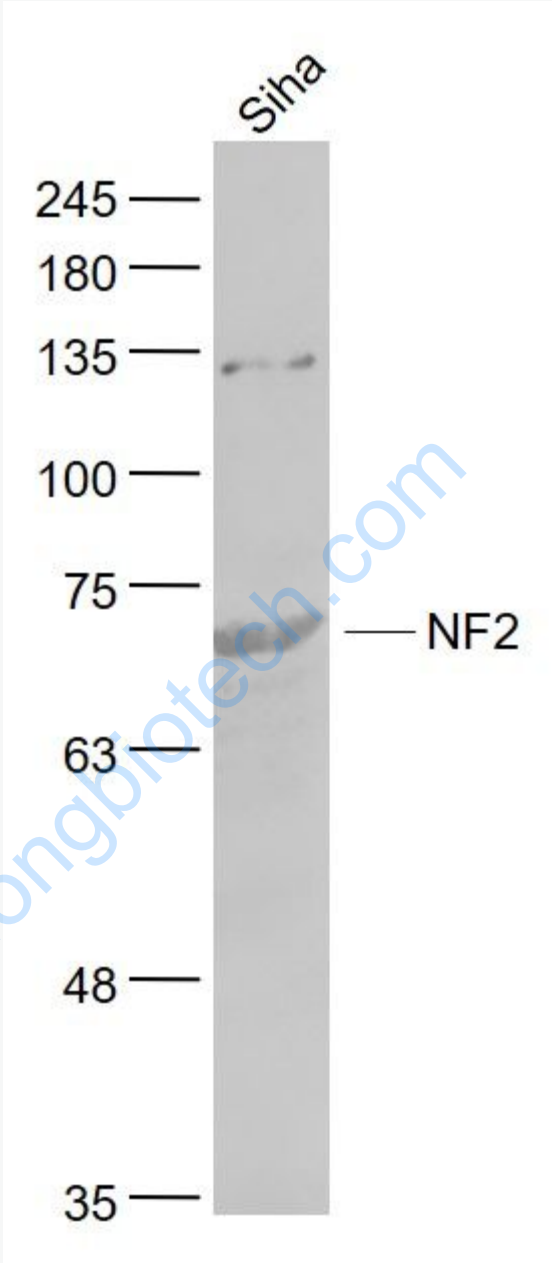
Post-translational modifications:
Phosphorylation of Ser-518 inhibits nuclear localization by disrupting the intramolecular association of the FERM domain with the C-terminal tail.
Ubiquitinated by the CUL4A-RBX1-DDB1-DCAF1/VprBP E3 ubiquitin-protein ligase complex for ubiquitination and subsequent proteasome-dependent degradation.

DISEASE:
Neurofibromatosis 2 (NF2) [MIM:101000]: Genetic disorder characterized by bilateral vestibular schwannomas (formerly called acoustic neuromas), schwannomas of other cranial and peripheral nerves, meningiomas, and ependymomas. It is inherited in an autosomal dominant fashion with full penetrance. Affected individuals generally develop symptoms of eighth-nerve dysfunction in early adulthood, including deafness and balance disorder. Although the tumors of NF2 are histologically benign, their anatomic location makes management difficult, and patients suffer great morbidity and mortality. Note=The disease is caused by mutations affecting the gene represented in this entry.
Schwannomatosis (SCHWA) [MIM:162091]: Schwannomas are benign tumors of the peripheral nerve sheath that usually occur singly in otherwise normal individuals. Multiple schwannomas in the same individual suggest an underlying tumor-predisposition syndrome. The most common such syndrome is NF2. The hallmark of NF2 is the development of bilateral vestibular-nerve schwannomas; but two-thirds or more of all NF2-affected individuals develop schwannomas in other locations, and dermal schwannomas may precede vestibular tumors in NF2-affected children. There have been several reports of individuals with multiple schwannomas who do not show evidence of vestibular schwannoma. Clinical report suggests that schwannomatosis is a clinical entity distinct from other forms of neurofibromatosis. Note=The disease is caused by mutations affecting the gene represented in this entry.
Mesothelioma, malignant (MESOM) [MIM:156240]: An aggressive neoplasm of the serosal lining of the chest. It appears as broad sheets of cells, with some regions containing spindle-shaped, sarcoma-like cells and other regions showing adenomatous patterns. Pleural mesotheliomas have been linked to exposure to asbestos. Note=The disease may be caused by mutations affecting the gene represented in this entry.

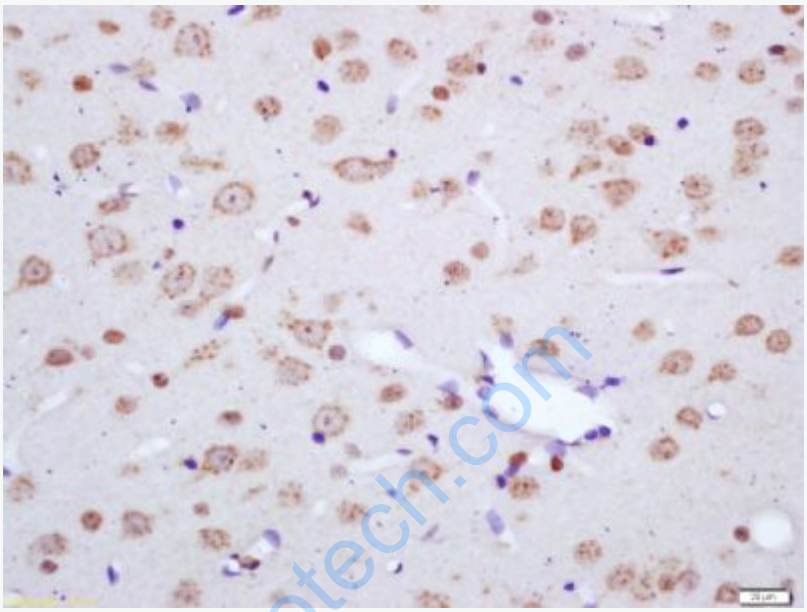
Similarity:
Contains 1 FERM domain.

SWISS:
P35240

	Gene ID: 4771 **Database links:** Entrez Gene: 4771Human Entrez Gene: 18016Mouse Entrez Gene: 25744Rat Omim: 607379Human SwissProt: P35240Human SwissProt: P46662Mouse SwissProt: Q63648Rat Unigene: 187898Human Unigene: 297109Mouse Unigene: 46695Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. Ⅱ型神经纤维瘤(neurofibromatosis Ⅱ,NF2)又称merlin蛋白在细胞与细胞的信号传递中起着关键作用，可能与其它类型癌症也有关联。

Picture:	 Sample: Siha(Human) Cell Lysate at 30 ug Primary: Anti- NF2 (SL1366R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 70 kD

Observed band size: 70 kD



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-NF2 Polyclonal Antibody, Unconjugated(SL1366R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining