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KD-Validated Anti-NF2 / Merlin Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1144

Specification

KD-Validated Anti-NF2 / Merlin Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P35240
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 70 kDa , observed, 70 kDa KDa**
Gene Name	**NF2**
Aliases	**NF2; NF2, Moesin-Ezrin-Radixin Like (MERLIN) Tumor Suppressor; SCH; Schwannomin; Merlin; BANF; ACN; Neurofibromin 2 (Bilateral Acoustic Neuroma); Bilateral Acoustic Neurofibromatosis; Moesin-Ezrin-Radixin-Like Protein; Moesin-Ezrin-Radixin Like; Neurofibromin-2 ; Schwannomerlin; Merlin-1; Moesin-Ezrin-Radizin-Like Protein; Neurofibromin 2 (Merlin); MERLIN-1; MERLIN; SWNV**
Immunogen	**A synthesized peptide derived from human NF2 / Merlin**

KD-Validated Anti-NF2 / Merlin Rabbit Monoclonal Antibody - Additional Information

Gene ID	**4771**

Other Names
Merlin, Moesin-ezrin-radixin-like protein, Neurofibromin-2, Schwannomerlin, Schwannomin, NF2, SCH

KD-Validated Anti-NF2 / Merlin Rabbit Monoclonal Antibody - Protein Information

Name NF2

Synonyms SCH

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.

Cellular 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 DCAF1 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 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

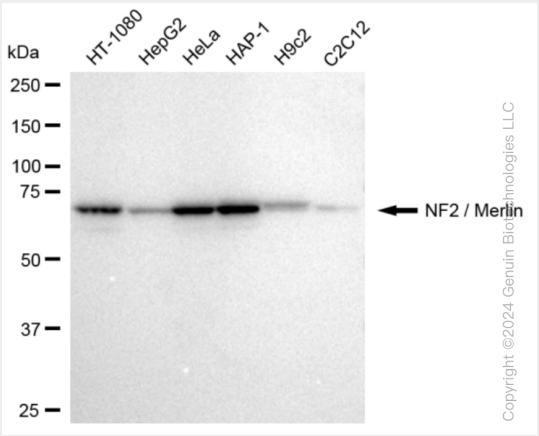
Tissue Location
Widely expressed. Isoform 1 and isoform 3 are predominant. Isoform 4, isoform 5 and isoform 6 are expressed moderately. Isoform 8 is found at low frequency. Isoform 7, isoform 9 and isoform 10 are not expressed in adult tissues, with the exception of adult retina expressing isoform 10. 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

KD-Validated Anti-NF2 / Merlin Rabbit Monoclonal 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

KD-Validated Anti-NF2 / Merlin Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-NF2 / Merlin antibody (Cat#AGI1144). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-NF2 / Merlin antibody (Cat#AGI1144, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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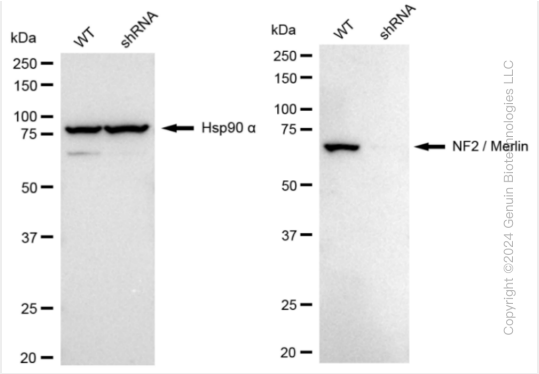
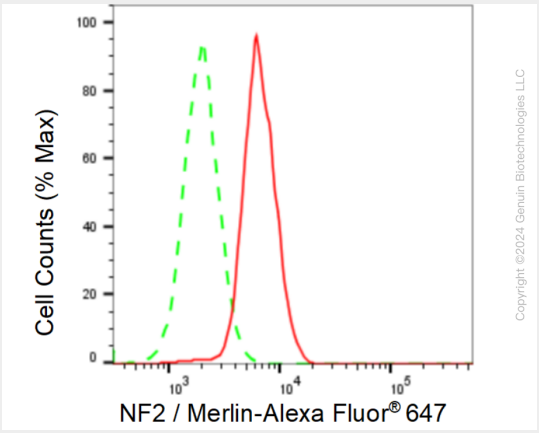
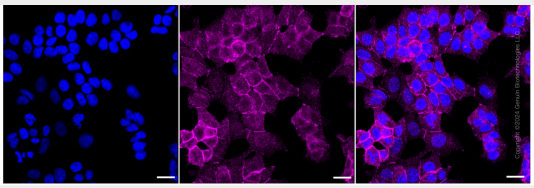


Western blotting analysis using anti-NF2 / Merlin antibody (Cat#AGI1144). NF2 / Merlin expression in wild type (WT) and NF2 / Merlin shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-NF2 / Merline antibody (Cat#AGI1144, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of NF2 / Merlin expression in HAP-1 cells using NF2 / Merlin antibody (Cat#AGI1144, 1:2,000). Green, isotype control; red, NF2 / Merlin.



Immunocytochemical staining of HAP-1 cells with NF2 / Merlin antibody (Cat#AGI1144, 1:1,000). Nuclei were stained blue with DAPI; NF2 / Merlin was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.