

Fn14 Antibody

Catalog # ASC10466

Specification

Fn14 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC-P, IF, E <u>O9NP84</u> <u>NP_057723</u>, <u>7706186</u> Human Rabbit Polyclonal IgG Fn14 antibody can be used for the detection of Fn14 by Western blot at 2 - 4 μg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μg/mL. For immunofluorescence start at 20 μg/mL.

Fn14 Antibody - Additional Information

Gene ID Other Names

51330

Fn14 Antibody: FN14, CD266, TWEAKR, FN14, Tumor necrosis factor receptor superfamily member 12A, Fibroblast growth factor-inducible immediate-early response protein 14, FGF-inducible 14, tumor necrosis factor receptor superfamily, member 12A

Target/Specificity TNFRSF12A;

Reconstitution & Storage

Fn14 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

Fn14 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Fn14 Antibody - Protein Information

Name TNFRSF12A

Synonyms FN14

Function

Receptor for TNFSF12/TWEAK. Weak inducer of apoptosis in some cell types. Promotes angiogenesis and the proliferation of endothelial cells. May modulate cellular adhesion to matrix proteins.



Cellular Location

Membrane; Single-pass type I membrane protein.

Tissue Location

Highly expressed in heart, placenta and kidney. Intermediate expression in lung, skeletal muscle and pancreas

Fn14 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Fn14 Antibody - Images



Western blot analysis of Fn14 in HepG2 cells with Fn14 antibody at (A) 2 and (B) 4 μ g/mL.



Immunohistochemistry of Fn14 in human liver tissue with Fn14 antibody at 2.5 µg/mL.





Immunofluorescence of Fn14 in Human Liver cells with Fn14 antibody at 20 μ g/mL.

Fn14 Antibody - Background

Fn14 Antibody: TWEAK is a TNF family member produced by IFN-gamma-stimulated monocytes and induces multiple cell death pathways including caspase-dependent apoptosis and cathepsin B-dependent necrosis. These pathways are mediated by the binding of TWEAK by fibroblast growth factor 14 (Fn14), a member of the TNF receptor superfamily. Yeast two-hybrid experiments have shown that FN14 will bind to the TNFR-associated factors TRAF1, TRAF2, TRAF3, and TRAF5, suggesting that the signaling pathway induced by TWEAK may be mediated by one or more of these adaptor molecules. Fn14 is induced during liver regeneration and is highly expressed in hepatocellular carcinomas. In addition, TWEAK induces liver progenitor cell proliferation, suggesting Fn14 may play a role in hepatocyte growth control and liver neoplasia.

Fn14 Antibody - References

Chicheportiche Y, Bourdon PR, Xu H, et al. TWEAK, a new secreted ligand in the tumor necrosis factor family that weakly induces apoptosis. J. Biol. Chem.1997; 272:32401-10. Nakayama M, Ishidoh K, Kojima Y, et al. Fibroblast growth factor-inducible 14 mediates multiple pathways of TWEAK-induced cell death. J. Immunol. 2003; 170:341-8. Brown SA, Richards CM, Hanscom HN, et al. The Fn14 cytoplasmic tail binds tumour-necrosis-factor-receptor-associated factors 1, 2, 3, and 5 and mediates nuclear factor-kappaB activation. Biochem. J. 2003; 371:395-403.

Feng SL, Guo Y, Factor VM, et al. The Fn14 immediate-early response gene is induced during liver regeneration and highly expressed in both human and murine hepatocellular carcinomas. Am. J. Pathol. 2000; 156:1253-61