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SLFN12 Antibody
Catalog # ASC11036

Specification

SLFN12 Antibody - Product Information

Application	**WB, E**
Primary Accession	Q8IYM2
Other Accession	NP_060512, 157388955
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**SLFN12 antibody can be used for detection of SLFN12 by Western blot at 1 µg/mL.**

SLFN12 Antibody - Additional Information

Gene ID	**55106**

Target/Specificity
SLFN12;

Reconstitution & Storage
SLFN12 antibody can be stored at 4℃ for three months and -20℃, 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
SLFN12 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SLFN12 Antibody - Protein Information

Name SLFN12 (HGNC:25500)

Function
Ribonuclease which is part of an E2/17beta-estradiol-induced pro-apoptotic signaling pathway. E2 stabilizes the PDE3A/SLFN12 complex in the cytosol, promoting the dephosphorylation of SLFN12 and activating its pro-apoptotic ribosomal RNA/rRNA ribonuclease activity. This apoptotic pathway might be relevant in tissues with high concentration of E2 and be for instance involved in placenta remodeling (PubMed:31420216, PubMed:34272366, PubMed:34707099, PubMed:35104454). May play a role in cell differentiation (PubMed:30045019).

Cellular Location
Nucleus. Cytoplasm, cytosol

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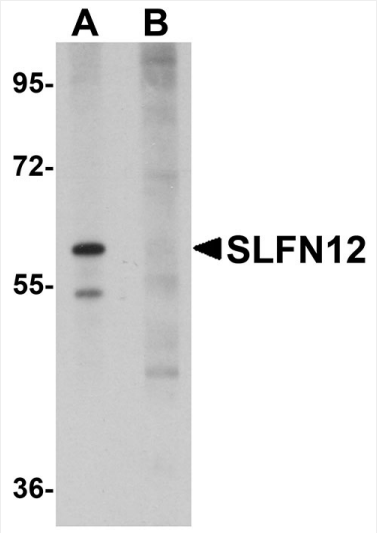
SLFN12 Antibody - Protocols

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

SLFN12 Antibody - Images



Western blot analysis of SLFN12 in SK-N-SH cell lysate with SLFN12 antibody at 1 µg/mL in (A) the absence and (B) the presence of blocking peptide.

SLFN12 Antibody - Background

SLFN12 Antibody: Despite being first described several years ago, the roles of the Schlafen (SLFN) family of proteins remain largely unknown. The SLFN genes are preferentially expressed in lymphoid tissues and differentially regulated during thymocyte maturation. It is thought that many play roles in cell growth, hemopoietic cell differentiation, and T cell development and maturation. Most members contain at least one divergent AAA domain (AAA_4) that may play a role in ATP binding. Although also known as SLFN3, a Schlafen family member that may be a marker of T cell activation, human SLFN12 has relatively low homology to SLFN3 in other species. Loss of the SLFN12 gene due to deletion is associated with Kabuki syndrome, a multiple congenital anomaly syndrome, suggesting SLFN may play a role in this genetic condition.

SLFN12 Antibody - References

Schwarz DA, Katamaya CD, and Hedrick SM. Schlafen, a new family of growth regulatory genes that affect thymocyte development. Immunity1998; 9:657-68.
Bustos O, Naik S, Ayers G, et al. Evolution of the Schlafen genes, a gene family associated with embryonic lethality, meiotic drive, immune processes and orthopoxvirus virulence. Gene2009; 447:1-11.

Condamine T, Le Laduec J-B, Chiffoleau E, et al. Characterization of Schlafen-3 expression in effector and regulatory T cells. J. Leuk. Biol.2010; 87:1-6.
Cusco I, del Campo M, Vilardell M, et al. Array-CGH in patients with Kabuki-like phenotype: Identification of two patients with complex rearrangements including 2q37 deletions and no other recurrent aberration. BMC Med. Gen.2008; 9:27.