

WFIKKN (T-15): sc-83487

BACKGROUND

WFIKKN (WAP, follistatin/kazal, immunoglobulin, kunitz and netrin domain containing 1), also known as WFIKKN1, is a secreted multi-domain protein. It is expressed in adult pancreas, liver, kidney and thymus and fetal lung, skeletal muscle and liver. WFIKKN contains a whey acidic protein (WAP) domain, a follistatin (FS) domain, an immunoglobulin (Ig) domain, two Kunitz (KU) domains and a netrin domain. The FS, WAP and KU domains are frequently involved in inhibition of serine proteases. This suggests that WFIKKN may be a multi-domain serine protease and metalloproteinase inhibitor. In particular, WFIKKN may regulate Trypsin activity.

REFERENCES

1. Trexler, M., et al. 2001. A human protein containing multiple types of protease-inhibitory modules. *Proc. Natl. Acad. Sci. USA* 98: 3705-3709.
2. Trexler, M., et al. 2002. Distinct expression pattern of two related human proteins containing multiple types of protease-inhibitory modules. *Biol. Chem.* 383: 223-228.
3. Nagy, A., et al. 2003. Expression, purification and characterization of the second Kunitz-type protease inhibitor domain of the human WFIKKN protein. *Eur. J. Biochem.* 270: 2101-2107.
4. Hill, J.J., et al. 2003. Regulation of myostatin *in vivo* by growth and differentiation factor-associated serum protein-1: a novel protein with protease inhibitor and follistatin domains. *Mol. Endocrinol.* 17: 1144-1154.
5. Bernocco, S., et al. 2003. Low resolution structure determination shows procollagen C-proteinase enhancer to be an elongated multidomain glycoprotein. *J. Biol. Chem.* 278: 7199-7205.

CHROMOSOMAL LOCATION

Genetic locus: WFIKKN1 (human) mapping to 16p13.3; *Wfikkn1* (mouse) mapping to 17 A3.3.

SOURCE

WFIKKN (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of WFIKKN of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83487 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

WFIKKN (T-15) is recommended for detection of WFIKKN of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

WFIKKN (T-15) is also recommended for detection of WFIKKN in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for WFIKKN siRNA (h): sc-72395, WFIKKN siRNA (m): sc-76926, WFIKKN shRNA Plasmid (h): sc-72395-SH, WFIKKN shRNA Plasmid (m): sc-76926-SH, WFIKKN shRNA (h) Lentiviral Particles: sc-72395-V and WFIKKN shRNA (m) Lentiviral Particles: sc-76926-V.

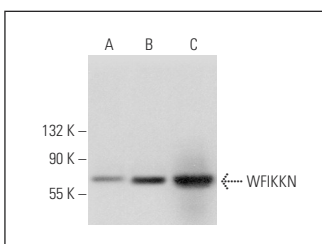
Molecular Weight of WFIKKN: 59 kDa.

Positive Controls: mouse liver extract: sc-2256, mouse placenta extract: sc-364247 or mouse lung extract: sc-2390.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



WFIKKN (T-15): sc-83487. Western blot analysis of WFIKKN expression in mouse liver (A), mouse placenta (B) and mouse lung (C) tissue extracts.

RESEARCH USE

For research use only, not for use in diagnostic procedures.