

Apelin (FL-77): sc-33804

BACKGROUND

Apelin (APEL), an endogenous ligand for APJ, is an alternate coreceptor with CD4 for HIV-1 infection. This secreted protein inhibits HIV-1 entry into cells that coexpress APJ and CD4. By proteolytic processing of the peptide precursor, several different active peptides may be produced. Apelin-36, one such inotropic peptide, is being investigated as a potential plasma marker of cardiopulmonary disease. Apelin is highly expressed in brain, mainly in the thalamus, frontal cortex, hypothalamus and midbrain. Apelin is also secreted by the mammary gland into the colostrum and milk. Oral intake of apelin (in milk and colostrum) may be important in the modulation of the immune responses in neonates and newborns. Apelin has also been found to be a potent stimulator of cardiac contractility and may function in the regulation of the cardiovascular system.

CHROMOSOMAL LOCATION

Genetic locus: APLN (human) mapping to Xq26.1; Apln (mouse) mapping to X A4.

SOURCE

Apelin (FL-77) is a rabbit polyclonal antibody raised against amino acids 38-77 mapping at the C-terminus of Apelin 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.

STORAGE

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

RESEARCH USE

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

APPLICATIONS

Apelin (FL-77) is recommended for detection of Apelin precursor and Apelin-36, Apelin-31, Apelin-28 and Apelin-13 processed active peptides of human and, to a lesser extent, mouse and rat 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). Apelin (FL-77) is also recommended for detection of Apelin precursor and Apelin-36, Apelin-31, Apelin-28 and Apelin-13 processed active peptides in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for Apelin siRNA (h): sc-44741, Apelin siRNA (m): sc-44742, Apelin shRNA Plasmid (h): sc-44741-SH, Apelin shRNA Plasmid (m): sc-44742-SH, Apelin shRNA (h) Lentiviral Particles: sc-44741-V and Apelin shRNA (m) Lentiviral Particles: sc-44742-V.

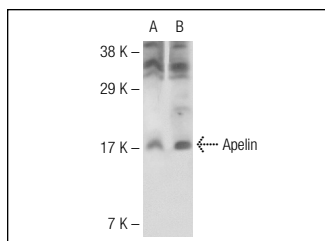
Molecular Weight of Apelin monomer: 8 kDa.

Molecular Weight of Apelin dimer: 16 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Apelin (FL-77): sc-33804. Western blot analysis of Apelin expression in A-10 (A) and HeLa (B) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Ameri, K., et al. 2010. Circulating tumour cells demonstrate an altered response to hypoxia and an aggressive phenotype. *Br. J. Cancer* 102: 561-569.
2. Piai, P., et al. 2011. The apelinergic system in the developing lung: expression and signaling. *Peptides* 32: 2474-2483.

PROTOCOLS

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

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Try **Apelin (2A1-2D5): sc-293441**, our highly recommended monoclonal alternative to Apelin (FL-77).