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 thecolostrum 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.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: APLN (human) mapping to Xq26.1.

**SOURCE**

Apelin (2A1-2D5) is a mouse monoclonal antibody raised against a recombinant protein mapping to amino acids 1-122 representing full length Apelin of human origin.

**PRODUCT**

Each vial contains 100 µg IgGκ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

Apelin (2A1-2D5) is recommended for detection of Apelin of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

Molecular Weight of Apelin monomer: 8 kDa.

Molecular Weight of Apelin dimer: 16 kDa.

Positive Controls: human breast extract: sc-363753.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz™ Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

**DATA**

Apelin (2A1-2D5): sc-293441; Western blot analysis of human recombinant Apelin fusion protein.

Apelin (2A1-2D5): sc-293441; Western blot analysis of Apelin expression in human breast tissue extract.

**SELECT PRODUCT CITATIONS**


**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.

**PROTOCOLS**

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