# Annexin IV (F-17): sc-30760



The Power to Question

# **BACKGROUND**

The Annexin family of calcium-binding proteins is composed of at least ten mammalian genes. It is characterized by a conserved core domain which binds to phospholipids in a Ca<sup>2+</sup>-dependent manner and a unique amino terminal region which may confer binding specificity. Annexin family members have been implicated as regulators of such diverse processes as ion flux, endocytosis and exocytosis, and cellular adhesion. For example, the crystal structure of Annexin III has suggested a hydrophilic amino terminus with possible Ca<sup>2+</sup> channel activity. Similarly, Annexin V has ion channel properties. Annexin IV, also referred to as endonexin, functions to regulate CI- flux by mediating calmodulin kinase II (CaMKII) activity and Annexin V has been shown to regulate PKC activity.

# **CHROMOSOMAL LOCATION**

Genetic locus: ANXA4 (human) mapping to 2p13.3; Anxa4 (mouse) mapping to 6 D1.

# **SOURCE**

Annexin IV (F-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Annexin IV of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-30760 P, (100  $\mu$ g 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.

# **APPLICATIONS**

Annexin IV (F-17) is recommended for detection of Annexin IV of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

Annexin IV (F-17) is also recommended for detection of Annexin IV in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Annexin IV siRNA (h): sc-29684, Annexin IV siRNA (m): sc-29685, Annexin IV shRNA Plasmid (h): sc-29684-SH, Annexin IV shRNA Plasmid (m): sc-29685-SH, Annexin IV shRNA (h) Lentiviral Particles: sc-29684-V and Annexin IV shRNA (m) Lentiviral Particles: sc-29685-V.

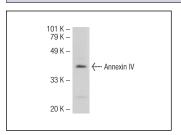
Molecular Weight of Annexin IV: 34 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, KNRK whole cell lysate: sc-2214 or RAW 309 cell lysate: sc-3814.

# **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**



Annexin IV (F-17): sc-30760. Western blot analysis of Annexin IV expression in Hep G2 whole cell lysate.

## **RESEARCH USE**

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

#### **PROTOCOLS**

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



Try **Annexin IV (D-2):** sc-46693 or **Annexin IV (H-2):** sc-374254, our highly recommended monoclonal alternatives to Annexin IV (F-17).

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