

# Annexin IV (T-13): sc-30761

## 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  $Ca^{2+}$ -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  $Ca^{2+}$  channel activity. Similarly, Annexin V has ion channel properties. Annexin IV, also referred to as endonexin, functions to regulate  $Cl^-$  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 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Annexin IV of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-30761 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

Annexin IV (T-13) 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 (T-13) is also recommended for detection of Annexin IV in additional species, including 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.

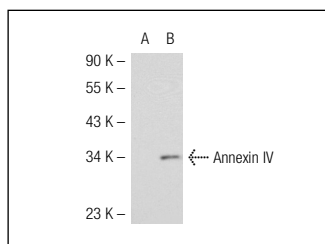
Molecular Weight of Annexin IV: 34 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, KNRK whole cell lysate: sc-2214 or Annexin IV (m): 293T Lysate: sc-118433.

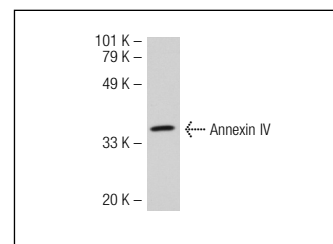
## RECOMMENDED SECONDARY REAGENTS

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 (T-13): sc-30761. Western blot analysis of Annexin IV expression in non-transfected: sc-117752 (A) and mouse Annexin IV transfected: sc-118433 (B) 293T whole cell lysates.



Annexin IV (T-13): sc-30761. Western blot analysis of Annexin IV expression in Hep G2 whole cell lysate.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

**MONOS**  
Satisfaction  
Guaranteed

Try **Annexin IV (D-2): sc-46693** or **Annexin IV (H-2): sc-374254**, our highly recommended monoclonal alternatives to Annexin IV (T-13).