

# Annexin VIII (C-20): sc-1933

## BACKGROUND

The Annexin family is composed of at least ten mammalian genes, which encode calcium-binding proteins. The Annexin proteins are characterized by a conserved core domain, which binds to phospholipids in a calcium-dependent manner. Annexin family members have been implicated as regulators of such diverse processes as ion flux, endocytosis and exocytosis, and cellular adhesion. Annexin V is ubiquitously expressed at high levels in tissues and cells grown in tissue culture, while Annexin VIII exhibits a more limited distribution. Where co-expressed in the same tissues, Annexin VIII is often expressed at a 100-fold lower level than Annexin V. However, Annexin VIII is preferentially expressed in acute promyelocytic leukemia (APL) cells which may relate to its role in hematopoietic cell differentiation. At this time it is believed that there are duplicated copies of ANXA8-like genes on human chromosome 10q11 which putatively encode 3 highly similar proteins designated ANXA8L1 and ANXA8L2 (Annexin A8-like 1 and Annexin A8-like 2).

## REFERENCES

1. Smith, P.D., et al. 1994. Structural evolution of the Annexin supergene family. *Trends Gen.* 10: 241-246.
2. Reutelingsperger, C.P., et al. 1994. Differential tissue expression of Annexin VIII in human. *FEBS Lett.* 349: 120-124.
3. Liu, J.H., et al. 1994. Expression of the Annexin VIII gene in acute promy-elocytic leukemia. *Leuk. Lymph.* 13: 381-386.
4. Chan, H.C., et al. 1994. Annexin IV inhibits calmodulin-dependent protein kinase II-activated chloride conductance. A novel mechanism for ion channel regulation. *J. Biol. Chem.* 269: 32464-32468.
5. Rothhut, B., et al. 1995. Inhibitory effect of Annexin V on protein kinase C activity in mesangial cell lysates. *Eur. J. Biochem.* 232: 865-872.
6. Mailliard, W.S., et al. 1996. Calcium-dependent binding of S-100C to the N-terminal domain of Annexin I. *J. Biol. Chem.* 271: 719-725.

## SOURCE

Annexin VIII (C-20) is available as either goat (sc1933) or rabbit (sc-1933-R) polyclonal affinity purified antibody raised against a peptide mapping at the C-terminus of Annexin VIII 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-1933 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.

## RESEARCH USE

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

## APPLICATIONS

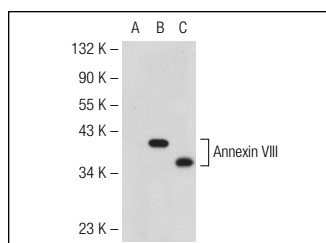
Annexin VIII (C-20) is recommended for detection of Annexin VIII and, to a lesser extent, Annexin VI and XI of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 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); also recommended for detection of ANXA8L1 and ANXA8L2 of human origin.

Annexin VIII (C-20) is also recommended for detection of Annexin VIII and, to a lesser extent, Annexin VI and XI in additional species, including equine, bovine and porcine.

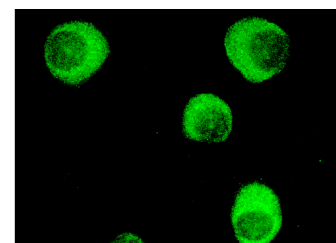
Molecular Weight of Annexin VIII: 36 kDa.

Positive Controls: Annexin VIII (h2): 293T Lysate: sc-170450, WI-38 whole cell lysate: sc-364260 or JAR cell lysate: sc-2276.

## DATA



Annexin VIII (C-20): sc-1933. Western blot analysis of Annexin VIII expression in non-transfected 293T: sc-117752 (A), human Annexin VIII transfected 293T: sc-170450 (B) and JAR (C) whole cell lysates.



Annexin VIII (C-20): sc-1933. Immunofluorescence staining of methanol-fixed KNRC cells showing cytoplasmic staining.

## SELECT PRODUCT CITATIONS

1. Stein, T., et al. 2005. Annexin A8 is up-regulated during mouse mammary gland involution and predicts poor survival in breast cancer. *Clin. Cancer Res.* 11: 6872-6879.
2. Chao, A., et al. 2006. Molecular characterization of adenocarcinoma and squamous carcinoma of the uterine cervix using microarray analysis of gene expression. *Int. J. Cancer* 119: 91-98.
3. Goebeler, V., et al. 2008. Annexin A8 regulates late endosome organization and function. *Mol. Biol. Cell* 19: 5267-5278.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **Annexin VIII (C-11): sc-514498** or **Annexin VIII (D-1): sc-271577**, our highly recommended monoclonal alternatives to Annexin VIII (C-20).