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Store at -20C
#8555

Annexin V Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W	Reactivity: H M R Mk	Sensitivity: Endogenous	MW (kDa): 30	Source/Isotype: Rabbit	UniProt ID: #P08758	Entrez-Gene Id: 308
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Product Usage Information

Application

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Annexin V Antibody recognizes endogenous levels of total annexin V protein. This antibody is not predicted to cross-react with other annexin family members.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human annexin V protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Annexin V, also known as PAP-1 or Lipocortin V, is an ~30 kDa protein that binds to phospholipids in a calcium-dependent manner (1). All annexins contain a putative PKC binding site, but only annexin V has been identified as an inhibitor of this pathway (2). Via direct interaction with VEGFR-2 receptor, annexin V may also signal to regulate vascular endothelial cell proliferation (3). Annexin V preferentially binds phosphatidylserine in competition with prothrombin, leading to inhibition of blood coagulation at sites of injury preceding contact between lipid components and coagulation factors that initiate thrombosis (4-6). The ability of annexin V to bind specifically and robustly to phosphatidylserine makes it an attractive reagent in detecting apoptotic cells (7). Annexin V is inducible by glucocorticoids and can be phosphorylated by tyrosine and serine/threonine kinases (8). It is thought to block the production of inflammation mediators, such as prostaglandins and leukotrienes by inhibiting the release of arachidonic acid from membranes by phospholipase A2 (8).

Background References

1. Huber, R. et al. (1990) *EMBO J* 9, 3867-74.
2. Cardó-Vila, M. et al. (2003) *Mol Cell* 11, 1151-62.
3. Wen, Y. et al. (1999) *Biochem Biophys Res Commun* 258, 713-21.
4. Koopman, G. et al. (1994) *Blood* 84, 1415-20.
5. London, F. et al. (1996) *Biochemistry* 35, 16886-97.
6. Thiagarajan, P. and Benedict, C.R. (1997) *Circulation* 96, 2339-47.
7. Vermes, I. et al. (1995) *J Immunol Methods* 184, 39-51.
8. Grundmann, U. et al. (1988) *Proc Natl Acad Sci USA* 85, 3708-12.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

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