Revision 1

#3666 Store at -20C

Annexin A7 Antibody

Cell Signaling TECHNOLOGY®

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H Mk	Endogenous	47, 51	Rabbit	#P20073	310

Product Usage Information

Application	Dilution
Western Blotting	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 A7 Antibody detects endogenous levels of total annexin A7 protein, including isoforms 1 and 2.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human annexin A7. Antibodies are purified using protein A and peptide affinity chromatography.

Background

Annexin A7/ANXA7 is a member of the annexin family of calcium/phospholipid-binding proteins, and is involved in the process of membrane fusion and exocytosis (1). Annexin A7 is a GTPase, and both GTP-binding and PKC activity are important in regulating protein function (2,3). Membrane binding of annexin A7 is calcium dependent (4). Two isoforms exist due to alternative splicing. Subcellular localization of annexin A7 has been shown to be in the cytoplasm, vesicular structures, membrane and in adrenal chromaffin granules (5,6). Nuclear localization has been shown in the developing mouse central nervous system as well as in adult mouse brain (7). Annexin A7-deficient mouse studies show that the protein has a role in insulin secretion and calcium signaling (8) as well as cardiac intracellular calcium homeostasis electrical stability (9). The gene for annexin A7 is a putative tumor suppressor (10), and alterations in the copy number have been reported in prostate cancer (11). Annexin A7 expression has also been correlated with survival in human glioblastoma patients (12), and haploinsufficiency in mice may promote genetic instability leading to tumorigenesis (13).

Background References

1. Pollard, H.B. et al. (1990) *J Membr Biol* 117, 101-12.
2. Caohuy, H. and Pollard, H.B. (2002) *J Biol Chem* 277, 25217-25.
3. Caohuy, H. et al. (1996) *Proc Natl Acad Sci USA* 93, 10797-802.
4. Chander, A. et al. (2003) *Cell Calcium* 33, 11-7.
5. Selbert, S. et al. (1995) *J Cell Sci* 108 (Pt 1), 85-95.
6. Clemen, C.S. et al. (2001) *Neuroreport* 12, 1139-44.
7. Rick, M. et al. (2005) *BMC Neurosci* 6, 25.
8. Srivastava, M. et al. (1999) *Proc Natl Acad Sci USA* 96, 13783-8.
9. Schrickel, J.W. et al. (2007) *Cardiovasc Res* 76, 257-68.
10. Srivastava, M. et al. (2001) *Proc Natl Acad Sci USA* 98, 4575-80.
11. Dong, J.T. (2006) *J Cell Biochem* 97, 433-47.
12. Hung, K.S. and Howng, S.L. (2003) *J Neurosurg* 99, 886-92.
13. Srivastava, M. et al. (2003) *Proc Natl Acad Sci USA* 100, 14287-92.

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 **Mk:** Monkey

Trademarks and Patents

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.