alpha-Fodrin Antibody

For Research Use Only. Not For Use In Diagnostic Procedures.

### Background:
Fodrin (also named nonerythroid spectrin) is a universally expressed membrane-associated cytoskeletal protein consisting of alpha- and beta-subunits (1). This protein is important for maintaining normal membrane structure and supporting cell surface protein function (1).  alpha-fodrin is one of the primary targets cleaved by caspases during apoptosis. The full length 240 kDa protein can be cleaved at several sites within its sequence by activated caspases to yield amino-terminal 150 kDa, carboxy-terminal 120 kDa and 35 kDa major products (2-5). Cleavage of alpha-fodrin leads to membrane malfunction and cell shrinkage.

### Specificity/Sensitivity:
alpha-Fodrin Antibody detects endogenous levels of full length alpha-fodrin (240 kDa) and its large fragment (150 kDa) resulting from cleavage at aspartic acid 1185.

### Source/Purification:
Polyclonal antibodies are produced by immunizing animals with a synthetic peptide (KLH-coupled) corresponding to residues surrounding Asp1185 of human alpha-fodrin. Antibodies are purified by protein A and peptide affinity chromatography.

### Background References:

### 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.

**Species cross-reactivity is determined by western blot.**

**Anti-rabbit secondary antibodies must be used to detect this antibody.**

### Recommended Antibody Dilutions:
Western blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

### Applications and Species Cross-Reactivity:

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<th>Molecular Wt.</th>
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<td>W Endogenous</td>
<td>H</td>
<td>150, 240 kDa</td>
<td>Rabbit*</td>
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Western blot analysis of extracts from HeLa cells, untreated or staurosporine-treated, using Cleaved alpha-Fodrin (Asp1185) Antibody #2121 (left) and alpha-Fodrin Antibody (right).

**Entrez-Gene ID #6711**

**Swiss-Prot Acc. #Q01082**

**IMPORTANT:** For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.