



# Mouse anti-Human ANK1 monoclonal antibody, clone 4D4 (CABT-B9758)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Immunogen</b>	ANK1 (AAH30957, 1 a.a. ~ 156 a.a) full length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Isotype</b>	IgG2a
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	4D4
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	IP,sELISA,ELISA
<b>Sequence Similarities</b>	MWTFVTQLLVTLVLLSFFLVSCQNMHIVRGSLCFVLKHHQELDKELGESEDLSDDDEET ISTRVVRRRVFLKGNEFQNPGEQVTEEQFTDEQGNIVTKKIIRKVVVRQIDLSSADAAQE HEEVELRGSGLPDLIEGRKGAQIVKRASLKRKGKQ*
<b>Format</b>	Liquid
<b>Size</b>	100 µg
<b>Buffer</b>	In 1x PBS, pH 7.2
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

## BACKGROUND

**Introduction** Ankyrins are a family of proteins that link the integral membrane proteins to the underlying

spectrin-actin cytoskeleton and play key roles in activities such as cell motility, activation, proliferation, contact and the maintenance of specialized membrane domains. Multiple isoforms of ankyrin with different affinities for various target proteins are expressed in a tissue-specific, developmentally regulated manner. Most ankyrins are typically composed of three structural domains: an amino-terminal domain containing multiple ankyrin repeats; a central region with a highly conserved spectrin binding domain; and a carboxy-terminal regulatory domain which is the least conserved and subject to variation. Ankyrin 1, the prototype of this family, was first discovered in the erythrocytes, but since has also been found in brain and muscles. Mutations in erythrocytic ankyrin 1 have been associated in approximately half of all patients with hereditary spherocytosis. Complex patterns of alternative splicing in the regulatory domain, giving rise to different isoforms of ankyrin 1 have been described. Truncated muscle-specific isoforms of ankyrin 1 resulting from usage of an alternate promoter have also been identified. [provided by RefSeq, Dec 2008]

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<b>Keywords</b>	ANK1; ankyrin 1, erythrocytic; ANK; SPH1; SPH2; ankyrin-1; ANK-1; ankyrin-R; erythrocyte ankyrin;
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## GENE INFORMATION

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<b>Entrez Gene ID</b>	<a href="#">286</a>
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<b>UniProt ID</b>	<a href="#">P16157</a>
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<b>Pathway</b>	Axon guidance, organism-specific biosystem; CHL1 interactions, organism-specific biosystem; Interaction between L1 and Ankyrins, organism-specific biosystem; L1CAM interactions, organism-specific biosystem; Neurofascin interactions, organism-specific biosystem; NrCAM interactions, organism-specific biosystem
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<b>Function</b>	cytoskeletal adaptor activity; cytoskeletal adaptor activity; enzyme binding; protein binding; spectrin binding; spectrin binding; structural constituent of cytoskeleton; structural molecule activity
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