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FABP7 Antibody

Catalog # ASC10551

Product Information

Application	WB, E, IHC-P
Primary Accession	O15540
Other Accession	EAW48166, 119568551
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	14889
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	FABP7 antibody can be used for detection of FABP7 by Western blot at 0.5 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL.

Additional Information

Gene ID	2173
Other Names	Fatty acid-binding protein, brain, Brain lipid-binding protein, BLBP, Brain-type fatty acid-binding protein, B-FABP, Fatty acid-binding protein 7, Mammary-derived growth inhibitor related, FABP7, BLBP, FABPB, MRG
Target/Specificity	FABP7;
Reconstitution & Storage	FABP7 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	FABP7 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FABP7
Synonyms	BLBP, FABPB, MRG
Function	B-FABP could be involved in the transport of a so far unknown hydrophobic ligand with potential morphogenic activity during CNS development. It is required for the establishment of the radial glial fiber system in developing brain, a system that is necessary for the migration of immature neurons to establish cortical layers (By similarity).

Cellular Location	Cytoplasm.
Tissue Location	Expressed in brain and other neural tissues.

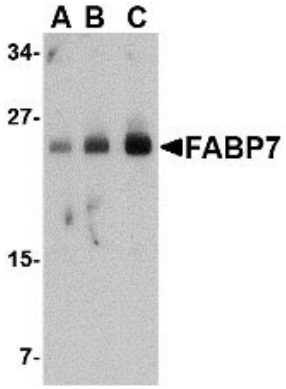
Background

FABP7 Antibody: FABP7 was initially isolated from a human fetal brain cDNA library and whose mRNA was expressed in adult brain and muscle tissues at low levels. The protein encoded by this gene is a member of the fatty acid binding protein (FABPs) family, a group of small, highly conserved, cytoplasmic proteins that bind long-chain fatty acids and other hydrophobic ligands. FABPs are thought to play roles in fatty acid uptake, transport, and metabolism. FABP7 is a downstream gene of the Pax6 transcription factor and has been suggested to be essential for the maintenance of neuroepithelial cells during early cortical development. More recently, FABP7 was found to be frequently expressed in melanomas. Down-regulation of FABP7 through RNAi expression could reduce in vitro cell proliferation and Matrigel invasion, suggesting that FABP7 may be a potential target for the development of diagnostic and therapeutic tools.

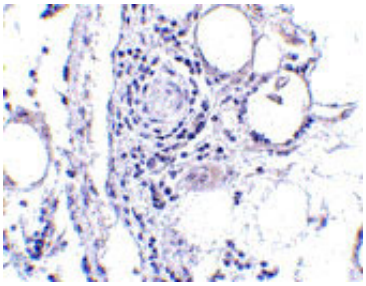
References

Shimizu F, Watanabe TK, Shinomiya H, et al. Isolation and expression of a cDNA for human brain fatty acid-binding protein (B-FABP). Biochim. Biophys. Acta1997; 1354:24-8.
Chmurzynska A. The multigene family of fatty acid-binding proteins (FABPs): function, structure and polymorphism. J. Appl. Genet.2006; 47:39-48.
Arai Y, Funatsu N, Numayama-Tsuruta K, et al. Role of FABP7, a downstream gene of pax6, in the maintenance of neuroepithelial cells during early embryonic development of the rat cortex. J. Neurosci.2005; 25:9752-61.
Goto Y, Matsuzaki Y, Kurihara S, et al. A new melanoma antigen fatty acid-binding protein 7, involved in proliferation and invasion, is a potential target for immunotherapy and molecular target therapy. Cancer Res.2006; 66:4443-9.

Images



Western blot analysis of FABP7 in human breast tissue lysate with FABP7 antibody at (A) 0.5, (B) 1 and (C) 2 µg/mL.



Immunohistochemistry of FABP7 in human breast tissue with FABP7 antibody at 5 µg/mL.