

FABP7 Antibody / Fatty acid-binding protein, brain Antibody (FY13557)

Catalog No.	Formulation	Size
FY13557	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
UniProt	O15540
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml ELISA : 0.1-0.5 ug/ml
Limitations	This FABP7 Antibody / Fatty acid-binding protein, brain Antibody is provided for laboratory research use only.

FABP7 Antibody by IHC in human brain. Immunohistochemistry of formalin-fixed, paraffin-embedded human brain using Fatty acid-binding protein, brain Antibody shows diffuse brown immunoreactivity in neural tissue, with staining distributed through the neuropil and among cellular profiles. Blue hematoxylin counterstaining highlights nuclei. Sections underwent heat-mediated antigen retrieval in EDTA buffer at pH 8.0, followed by blocking with 10% goat serum. Primary antibody was applied at 2 ug/mL overnight at 4°C. HRP-conjugated secondary antibody and DAB chromogen were used to visualize staining.

FABP7 Antibody by WB in human Caco-2 cells. Western blot analysis using Fatty acid-binding protein, brain Antibody detects a prominent band near 15 kDa in human Caco-2 whole-cell lysate (lane 1), matching the calculated molecular weight of approximately 15 kDa for FABP7. A total of 30 ug protein was loaded under reducing conditions and separated by 12% SDS-PAGE before transfer to nitrocellulose. Following blocking with 5% nonfat milk, the membrane was incubated with primary antibody at 0.5 ug/mL overnight at 4°C. An HRP-conjugated secondary antibody and chemiluminescent substrate were used for detection.

Description

FABP7 Antibody / Fatty acid-binding protein, brain Antibody detects FABP7, often called brain-type fatty acid-binding protein or B-FABP. It belongs to the intracellular fatty acid-binding protein family, whose members bind hydrophobic lipid molecules within a compact beta-barrel structure. FABP7 can bind long-chain fatty acids, including polyunsaturated species, and is associated with the intracellular handling and distribution of these lipids.

FABP7 is prominent in developing neural tissues, especially in radial glial cells that help organize neuronal migration and provide progenitors for different nervous-system lineages. Its expression changes during development as neural precursor populations mature. FABP7 is also associated with astroglial biology, where lipid handling intersects with membrane maintenance, metabolic adaptation, and responses to changes in the local environment.

Fatty acids are not simply energy substrates; they also contribute to membrane composition and serve as precursors for signaling molecules. By binding lipid ligands, FABP7 may influence their intracellular availability and movement between compartments. Experimental studies have linked FABP7 to aspects of neural cell differentiation, migration, and lipid-associated signaling, although individual effects depend on the cell type and physiological setting. The distinction between a lipid-binding capacity and a specific downstream biological outcome is important when interpreting FABP7 function.

Changes in FABP7 expression have been reported in certain brain tumors and other cancers, where investigators have explored associations with tumor-cell behavior and lineage identity. Such associations do not establish a uniform causal role across malignancies. FABP7 is also of interest in studies of neural development and glial physiology because its distribution reflects specialized lipid requirements in the nervous system. NSJ Bioreagents provides the FABP7 Antibody for work on these molecular relationships. An FABP7 Antibody can aid the study of fatty acid-binding protein biology and neural cell differentiation.

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Application Notes

Optimal working dilutions for the FABP7 Antibody / Fatty acid-binding protein, brain Antibody should be established experimentally for each assay.

Immunogen

The FABP7 Antibody was generated using e. coli-derived human FABP7 recombinant protein (amino acids T12-A132).

Storage

Store the reconstituted FABP7 Antibody at 4°C for up to one month. For long-term storage, divide into aliquots and keep at -20°C for up to six months. Avoid repeated freeze-thaw cycles.

Alternate Names

FABP7 antibody, Fatty acid-binding protein, brain antibody, Fatty acid-binding protein antibody, brain antibody, fatty acid binding protein 7 antibody, B FABP antibody, BLBP antibody, Brain lipid binding protein antibody, FABPB antibody, MRG antibody

