Anti-BLBP Antibody [PSH10-68]

HA723232

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Mouse, Rat, Cynomolgus monkey, Pig
Applications:	WB, IHC-P, IHC-Fr, IF-Tissue, mIHC, IF-Cell
Molecular Wt:	Predicted band size: 15 kDa
Clone number:	PSH10-68

Description: Fatty acid binding protein 7, brain (FABP7; also brain lipid binding protein, BLBP), is a human gene. The protein encoded by this gene is a brain fatty acid binding protein. Fatty acid binding proteins (FABPs) are a family 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 expressed, during development, in radial glia by the activation of Notch receptors. Reelin was shown to induce FABP7 expression in neural progenitor cells via Notch-1 activation. According to one study, FABP7 binds DHA with the highest affinity among all of the FABPs.

Immunogen: Recombinant protein within Mouse BLBP aa 1-132.

Positive control: Mouse P7 brain tissue, mouse cerebellum tissue, Mouse cerebellum (P0) tissue lysate, Mouse cerebellum (P7) tissue lysate, Rat cerebellum tissue lysate.

Subcellular location: Cytoplasm.

Database links: SwissProt: P51880 Mouse | P55051 Rat

Recommended Dilutions:

WB	1:5,000
IHC-P	1:2,000
IHC-Fr	1:500
IF-Tissue	1:1,000
mIHC	1:2,000
IF-Cell	1:5,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

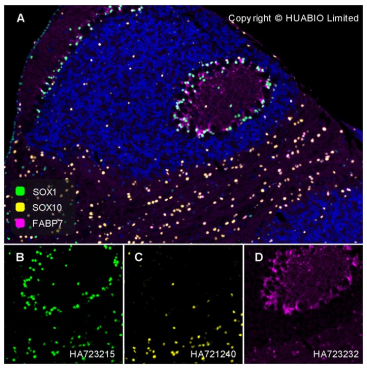


Fig1: mIHC analysis of mouse cerebellum tissue (paraffin-embedded) with BLBP (HA723232, 1/2,000), SOX1 (HA723215, 1/400) and SOX10 (HA721240, 1/1,000).

The immunostaining was performed with the IRISKitCmTSA Kit (900802). DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

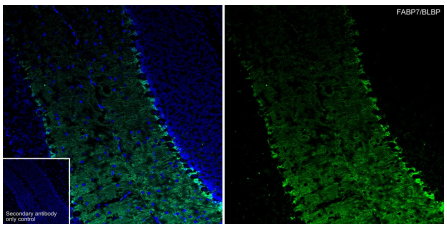


Fig2: Application: IHC-Fr

Species: Mouse
Site: Cerebellum
Sample: Frozen section

Antibody concentration: 1/500

Antigen retrieval: Not required

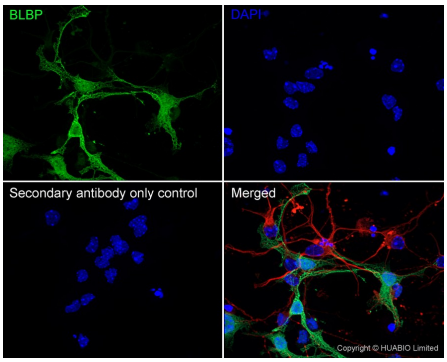


Fig3: Application: Immunocytochemistry (IF-cell)

Species: Mouse
Sample: C57 brain mixed astrocytes

Fixation: 4% Paraformaldehyde, 15 minutes at room temperature.
Permeabilization: 0.1% Triton X-100, 15 minutes at room temperature.
Blocking: 1% BSA + 10% normal goat serum, 1 hour at room temperature.
Antibody dilution buffer: 1% BSA in PBST.

Primary antibody: HA723232, 1/5,000, overnight at 4℃.
Secondary antibody: Goat Anti-Rabbit IgG (iFluor™ 488, HA1121), 45 minutes at room temperature.
Counterstain: Beta III Tubulin (HA601654, Red), 1/1,000, overnight at 4℃. The nuclear counterstain was DAPI (Blue).

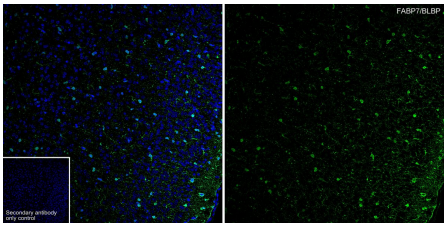


Fig4: Application: IF-tissue

Species: Mouse
Site: Cerebral cortex (P7)
Sample: Paraffin-embedded section

Antibody concentration: 1/1,000

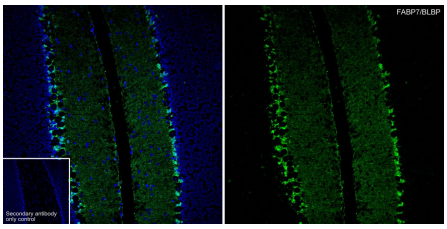


Fig5: Application: IF-tissue

Species: Mouse
Site: Cerebellum
Sample: Paraffin-embedded section

Antibody concentration: 1/1,000



Fig6: Immunohistochemical analysis of paraffin-embedded mouse P7 brain tissue with Rabbit anti-BLBP antibody (HA723232) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA723232) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

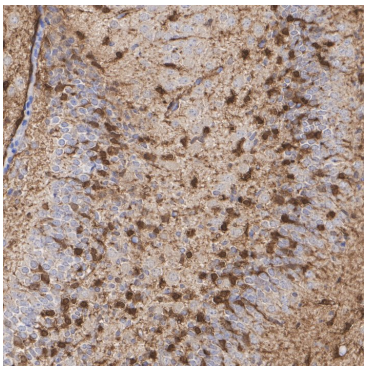


Fig7: Immunohistochemical analysis of paraffin-embedded mouse P7 brain tissue with Rabbit anti-BLBP antibody (HA723232) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA723232) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

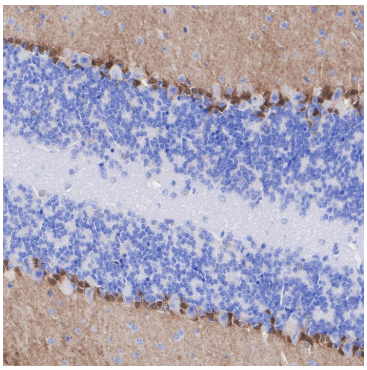


Fig8: Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue with Rabbit anti-BLBP antibody (HA723232) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA723232) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

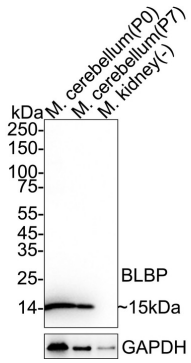


Fig9: Western blot analysis of BLBP on different lysates with Rabbit anti-BLBP antibody (HA723232) at 1/5,000 dilution.

Lane 1: Mouse cerebellum (P0) tissue lysate
Lane 2: Mouse cerebellum (P7) tissue lysate
Lane 3: Mouse kidney tissue lysate (negative)

Lysates/proteins at 20 µg/Lane.

Predicted band size: 15 kDa
Observed band size: 15 kDa

Exposure time: 14 seconds; ECL: K1801;
4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA723232) at 1/5,000 dilution was used in primary antibody dilution at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

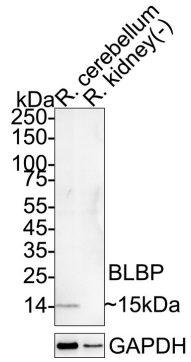


Fig10: Western blot analysis of BLBP on different lysates with Rabbit anti-BLBP antibody (HA723232) at 1/5,000 dilution.

Lane 1: Rat cerebellum tissue lysate
Lane 2: Rat kidney tissue lysate (negative)

Lysates/proteins at 20 µg/Lane.

Predicted band size: 15 kDa
Observed band size: 15 kDa

Exposure time: 59 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA723232) at 1/5,000 dilution was used in primary antibody dilution at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

2. Holst CB et al. The HOPX and BLBP landscape and gliogenic regions in developing human brain. J Anat. 2023 Jul