

Anti-OPN5 Antibody Picoband®

Catalog Number: A08880-2

About OPN5

Opsins are members of the guanine nucleotide-binding protein (G protein)-coupled receptor superfamily. This opsin gene is expressed in the eye, brain, testes, and spinal cord. This gene belongs to the seven-exon subfamily of mammalian opsin genes that includes peropsin (RRH) and retinal G protein coupled receptor (RGR). Like these other seven-exon opsin genes, this family member may encode a protein with photoisomerase activity. Alternative splicing results in multiple transcript variants.

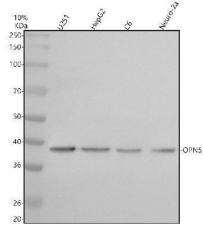
Overview

Product Name	Anti-OPN5 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-OPN5 Antibody Picoband® catalog # A08880-2. Tested in WB, IHC, IF applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IF, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	Q6U736

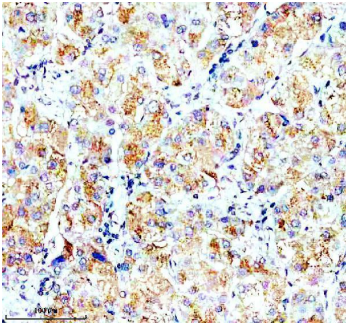
Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human OPN5. Human OPN5 shares 95.8% amino acid (aa) sequence identity with mouse OPN5.
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human Immunofluorescence, 5 ug/ml, Human

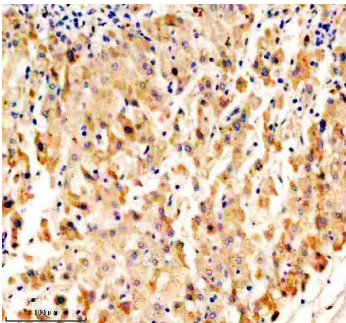
Anti-OPN5 Antibody Picoband® (A08880-2) Images



Western blot analysis of OPN5 using anti-OPN5 antibody (A08880-2). Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human U251 whole cell lysates, Lane 2: human HepG2 whole cell lysates, Lane 3: rat C6 whole cell lysates, Lane 4: mouse Neuro-2a whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-OPN5 antigen affinity purified polyclonal antibody (A08880-2) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for OPN5 at approximately 40 kDa. The expected band size for OPN5 is at 40 kDa.

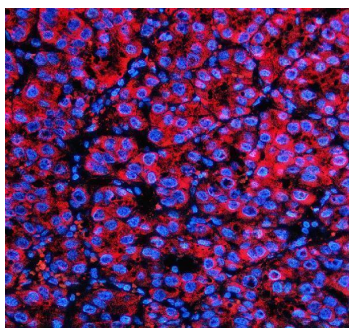


IHC analysis of OPN5 using anti-OPN5 antibody (A08880-2). OPN5 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-OPN5 Antibody (A08880-2) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



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IF analysis of OPN5 using anti-OPN5 antibody (A08880-2). OPN5 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat



serum. The tissue section was then incubated with 5 ug/mL rabbit anti-OPN5 Antibody (A08880-2) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

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Anti-OPN5 Antibody

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