BOSTER
antibody and ELISA experts

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Anti-Serotonin transporter/SLC6A4 Antibody Picoband®

Catalog Number: PB9438

About SLC6A4

SLC6A4 (Solute carrier family 6, member 4), also known as SERT (serotonin transporter), is a monoamine transporter protein. The SLC6A4 gene spans 31 kb and contains 14 exons. This protein integral membrane protein transports the neurotransmitter serotonin from synaptic spaces into presynaptic neurons. This transport of serotonin by the SERT protein terminates the action of serotonin and recycles it in a sodium-dependent manner. This protein is the target of many antidepressant medications, including those of the SSRI class. It is a member of the sodium: neurotransmitter symporter family. A repeat length polymorphism in the promoter of this gene has been shown to affect the rate of serotonin uptake and may play a role in sudden infant death syndrome, aggressive behavior in Alzheimer disease patients, post-traumatic stress disorder and depression-susceptibility in people experiencing emotional trauma.

Overview

Product Name	Anti-Serotonin transporter/SLC6A4 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Serotonin transporter/SLC6A4 Antibody Picoband® catalog # PB9438. Tested in IF, IHC, WB 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 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Storage Instructions	Store 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 freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P31645

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human SLC6A4, different from the related mouse and rat sequences by six amino acids.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized

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Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Mouse, Rat Immunofluorescence, 5 ug/ml, Mouse, Rat

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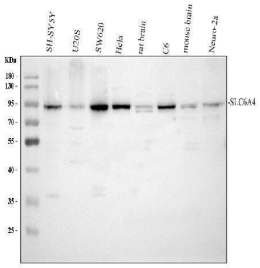
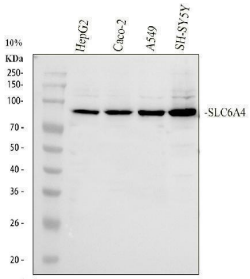
Anti-Serotonin transporter/SLC6A4 Antibody Picoband® (PB9438) Images



Western blot analysis of SLC6A4 using anti-SLC6A4 antibody (PB9438). 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 SH-SY5Y whole cell lysates, Lane 2: human U2OS whole cell lysates, Lane 3: human SW620 whole cell lysates, Lane 4: human Hela whole cell lysates, Lane 5: rat brain tissue lysates, Lane 6: rat C6 whole cell lysates, Lane 7: mouse brain tissue lysates, Lane 8: 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-SLC6A4 antigen affinity purified polyclonal antibody (PB9438) 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 (Catalog # BA1054) 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 SLC6A4 at approximately 70-90 kDa. The expected band size for SLC6A4 is at 70 kDa.



Western blot analysis of SLC6A4 using anti-SLC6A4 antibody (PB9438). 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 HepG2 whole cell lysates, Lane 2: human CACO-2 whole cell lysates, Lane 3: human A549 whole cell lysates, Lane 4: human SH-SY5Y 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-SLC6A4 antigen affinity purified polyclonal antibody (PB9438) 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 (Catalog # BA1054) 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 SLC6A4 at approximately 70-90 kDa. The expected band size for SLC6A4 is at 70 kDa.

Western blot analysis of SLC6A4 using anti-SLC6A4 antibody (PB9438). 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: rat testis tissue lysates, Lane 2: mouse testis tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose

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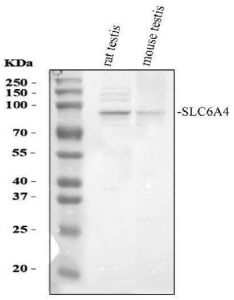
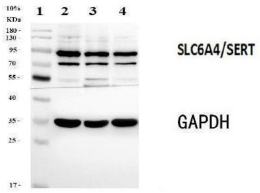
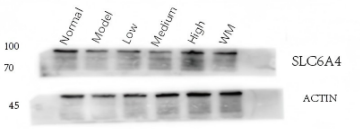


membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SLC6A4 antigen affinity purified polyclonal antibody (PB9438) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054) 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 SLC6A4 at approximately 70-90 kDa. The expected band size for SLC6A4 is at 70 kDa.



Western blot analysis of SLC6A4 using anti-SLC6A4 antibody (PB9438) . 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 2: human 293T whole cell lysatess. Lane 3: human MCF-7 whole cell lysatess. Lane 4: human A549 whole cell lysatess. 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-SLC6A4 antigen affinity purified polyclonal antibody (PB9438) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 10 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 an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for SLC6A4 at approximately 95 kDa. The expected band size for SLC6A4 is at 95 kDa.



Western blot analysis of SLC6A4 using anti-SLC6A4 antibody (PB9438) . 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: Normal group-rat colon tissue lysates, Lane 2: Model group-rat colon tissue lysates, Lane 3: Triditional Chinese medicine treatment (low dose)-rat colon tissue lysates, Lane 4: Triditional Chinese medicine treatment (medium dose)-rat colon tissue lysates, Lane 5: Triditional Chinese medicine treatment(high dose)-rat colon tissue lysates, Lane 6: Western medicine treatment-rat colon tissue 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-SLC6A4 antigen affinity purified polyclonal antibody (PB9438) at 1:1000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 10 minutes each and probed with a HRP Conjugated AffiniPure Goat Anti-rabbit IgG (H+L) secondary antibody at a dilution of 1:5000 for 1 hour at RT. The signal is developed using an an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with ChemiDoc MP system. A specific band was detected for SLC6A4 at approximately 95 kDa. The expected band size

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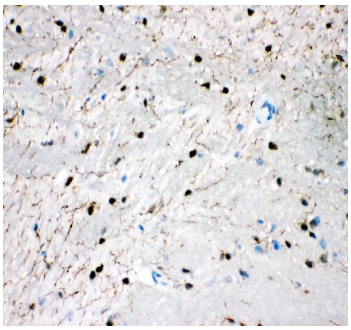
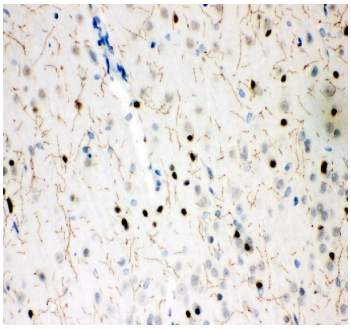


IHC analysis of SLC6A4 using anti-SLC6A4 antibody (PB9438). SLC6A4 was detected in a paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-SLC6A4 Antibody (PB9438) 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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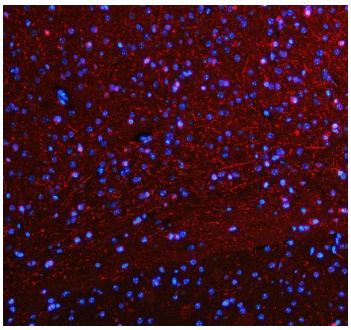
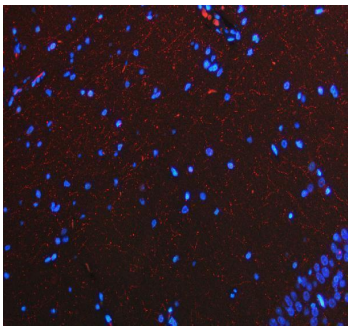


IF analysis of SLC6A4 using anti-SLC6A4 antibody (PB9438). SLC6A4 was detected in paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5ug/mL rabbit anti-SLC6A4 Antibody (PB9438) 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.



IF analysis of SLC6A4 using anti-SLC6A4 antibody (PB9438). SLC6A4 was detected in paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5ug/mL rabbit anti-SLC6A4 Antibody (PB9438) 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.

1 Publications Citing This Product

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1. PubMed ID: 31452710, Liu ZJ,Liu H,Wu C,Xue K.Effect of sepsis on the action potential and cardiac serotonin response in rats.Exp Ther Med.2019 Sep;18(3):2207-2212.doi:10.3892/etm.2019.7810.Epub 2019 Jul 25.PMID:31452710;PMCID:PMC6704535.

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Anti-Serotonin transporter/SLC6A4 Antibody

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