Datasheet for ABIN5692803

anti-Betacellulin antibody (AA 32-177)

5 Images

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Overview

Quantity:	100 µg
Target:	Betacellulin (BTC)
Binding Specificity:	AA 32-177
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

Product Details

Brand:	Picoband™
Immunogen:	E. coli-derived rat Betacellulin recombinant protein (Position: D32-A177).
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Betacellulin detection. Tested with WB, IHC-P, Direct ELISA in Mouse,Rat.

Target Details

Target:	Betacellulin (BTC)
Alternative Name:	Btc (BTC Products)
Background:	Synonyms: Betacellulin Background: Betacellulin is a protein that in humans is encoded by the BTC gene located on chromosome 4 at locus 4q13-q21. This gene encodes a member of the epidermal growth

Target Details

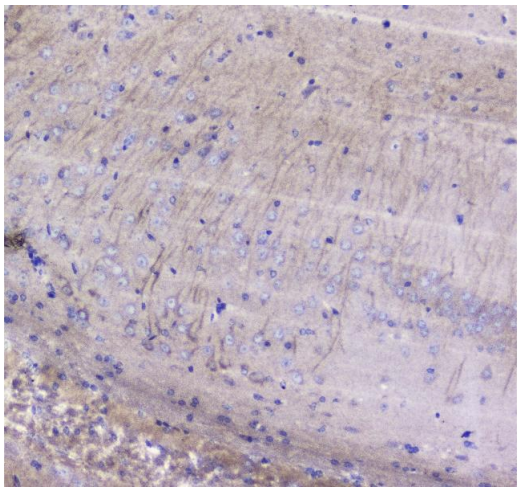
	factor (EGF) family of proteins. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate the secreted growth factor. A secreted form and a membrane-anchored form of this protein bind to multiple different EGF receptors. This protein promotes pancreatic cell proliferation and insulin secretion, as well as retinal vascular permeability. Mutations in this gene may be associated with type 2 diabetes in human patients.
Pathways:	RTK Signaling, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway

Application Details

Application Notes:	Recommended Detection Systems: Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P). Application Details: Western blot,0.1-0.5 µg/mL Immunohistochemistry(Paraffin-embedded Section),0.5-1 µg/mL Direct ELISA,0.1-0.5 µg/mL
Restrictions:	For Research Use only

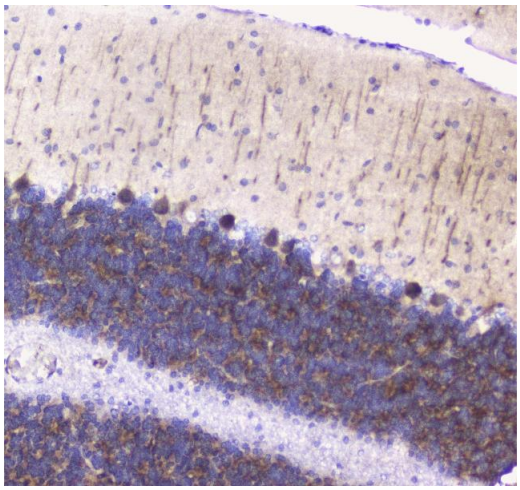
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na_2HPO_4, 0.05 mg NaN_3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.



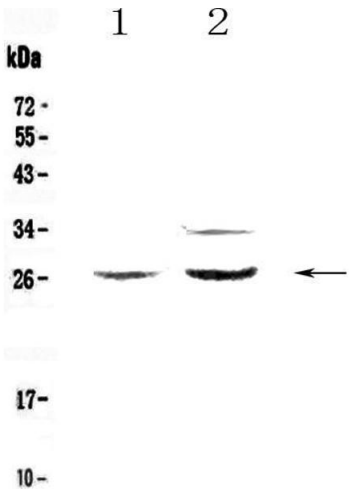
Immunohistochemistry

Image 1. IHC analysis of Betacellulin using anti-Betacellulin antibody . Betacellulin was detected in paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml rabbit anti-Betacellulin Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



Immunohistochemistry

Image 2. IHC analysis of Betacellulin using anti-Betacellulin antibody . Betacellulin was detected in paraffin-embedded section of rat cerebellum tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml rabbit anti-Betacellulin Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



Western Blotting

Image 3. Western blot analysis of Betacellulin using anti-Betacellulin antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat PC-12 whole cell lysates, Lane 2: rat RH35 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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-Betacellulin antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/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 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Betacellulin at approximately 26KD. The expected band size for Betacellulin is at 20KD.

Please check the product details page for more images. Overall 5 images are available for ABIN5692803.