

Anti-Kallikrein 1/Ngfg Antibody

Catalog Number: PA1633

About Ngfg

KLK1 (KALLIKREIN 1), also called KLKR, is a protein that in humans is encoded by the KLK1 gene. KLK1 is a member of the peptidase S1 family. KLK1 is a serine protease that generates Lys-bradykinin by specific proteolysis of kininogen-1. The KLK1 gene is one of the fifteen kallikrein subfamily members located in a cluster on chromosome 19 and its exact cytogenetic location is 19q13.33. The KLK1 gene contains 5 coding exons. And KLK1 is the most centromeric gene in the cluster. Mice lacking tissue kallikrein are unable to generate significant levels of kinins in most tissues and develop cardiovascular abnormalities early in adulthood despite normal blood pressure. The protein is functionally conserved in its capacity to release the vasoactive peptide, Lys-bradykinin, from low molecular weight kininogen.

Overview

Product Name	Anti-Kallikrein 1/Ngfg Antibody
Reactive Species	Rat
Description	Boster Bio Anti-Kallikrein 1/Ngfg Antibody catalog # PA1633. Tested in IHC, WB applications. This antibody reacts with Rat.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg 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	P00758

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of rat Kallikrein 1.
Predicted Reactive Species	Hamster
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Rat, By Heat Western blot, 0.1-0.5ug/ml, Rat

Anti-Kallikrein 1/Ngfg Antibody (PA1633) Images



Figure 1. Western blot analysis of Kallikrein 1 using anti-Kallikrein 1 antibody (PA1633). 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 30 ug of sample under reducing conditions.

Lane 1: rat pancreas tissue lysates,

Lane 2: rat kidney 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-Kallikrein 1 antigen affinity purified polyclonal antibody (Catalog # PA1633) 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 Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Kallikrein 1 at approximately 29 kDa. The expected band size for Kallikrein 1 is at 29 kDa.

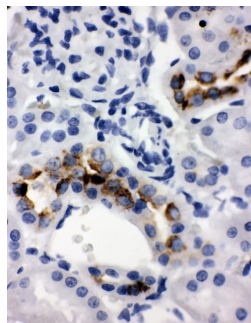


Figure 2. IHC analysis of Kallikrein 1 using anti-Kallikrein 1 antibody (PA1633).

Kallikrein 1 was detected in a paraffin-embedded section of rat kidney 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 1 ug/ml rabbit anti-Kallikrein 1 Antibody (PA1633) 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.

2 Publications Citing This Product

1. PubMed ID: 28977871, The Goblet Cell Protein Clca1 (Alias mClca3 or Gob-5) Is Not Required for Intestinal Mucus Synthesis, Structure and Barrier Function in Naive or DSS-Challenged Mice
2. PubMed ID: 25341032, Dynamic involvement of ATG5 in cellular stress responses

Visit bosterbio.com/anti-kallikrein-1-antibody-pa1633-boster.html to see all 2 publications.

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