

Anti-ACTH/POMC Antibody

Catalog Number: PB9039

About POMC

Adrenocorticotrophic hormone (ACTH), also known as corticotropin, is a polypeptide tropic hormone produced and secreted by the anterior pituitary gland. It is an important component of the hypothalamic-pituitary-adrenal axis and is often produced in response to biological stress (along with its precursor corticotropin-releasing hormone from the hypothalamus). Its principal effects are increased production and release of corticosteroids. ACTH stimulates secretion of glucocorticoid steroid hormones from adrenal cortex cells, especially in the zona fasciculata of the adrenal glands. This gene can influence steroid hormone secretion by both rapid short-term mechanisms that take place within minutes and slower long-term actions. Besides, ACTH also enhances transcription of mitochondrial genes that encode for subunits of mitochondrial oxidative phosphorylation systems.

Overview

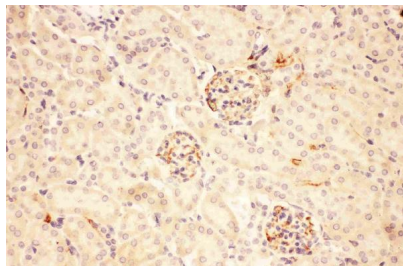
Product Name	Anti-ACTH/POMC Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-ACTH/POMC Antibody catalog # PB9039. Tested in IHC applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ , and 0.05 mg NaN ₃ . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
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	P01189

Technical Details

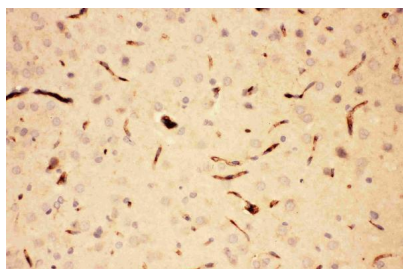
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human ACTH, different from the related mouse and rat sequences by two amino acids.
Recommended Detection Systems	Boster recommends HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	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	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Mouse, Rat, Human

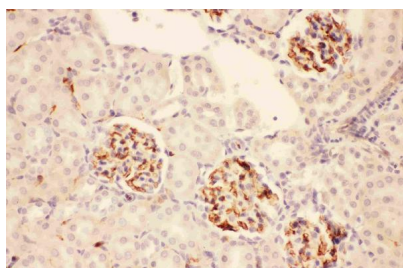
Anti-ACTH/POMC Antibody (PB9039) Images



IHC analysis of ACTH using anti-ACTH antibody (PB9039). ACTH was detected in paraffin-embedded section of mouse kidney tissues. 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 1ug/ml rabbit anti-ACTH Antibody (PB9039) 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 Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



IHC analysis of ACTH using anti-ACTH antibody (PB9039). ACTH was detected in paraffin-embedded section of rat brain tissues. 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 1ug/ml rabbit anti-ACTH Antibody (PB9039) 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 Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



IHC analysis of ACTH using anti-ACTH antibody (PB9039). ACTH was detected in paraffin-embedded section of rat kidney tissues. 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 1ug/ml rabbit anti-ACTH Antibody (PB9039) 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 Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

2 Publications Citing This Product

1. PubMed ID: 16355451, Chen L, Wang H, Zhao Z, Zhang Y, Huang G. Am J Chin Med. 2005;33(6):945-55. Effects Of The Extract Of A Chinese Herb Tripterygium Wilfordii Hook F On Rat Pituitary Gland.
2. PubMed ID: 25624795, Huo J, Liu J, Wang J, Zhang Y, Wang C, Yang Y, Sun W, Xu S. Neural Regen Res. 2012 Aug 5;7(22):1729-35. Doi: 10.3969/J.Issn.1673-5374.2012.22.008. Early Hyperbaric Oxygen Therapy Inhibits Aquaporin 4 And Adrenocorticotrophic Hormone Expression In T...

Visit bosterbio.com/anti-acth-picoband-trade-antibody-pb9039-boster.html to see all 2 publications.

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-ACTH/POMC Antibody

For Research Use Only. Not for use in diagnostic procedures.