BOSTER
antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

Anti-PHD2/EGLN1 Antibody Picoband®

Catalog Number: A00415-1

About EGLN1

The protein encoded by this gene catalyzes the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF) alpha proteins. HIF is a transcriptional complex that plays a central role in mammalian oxygen homeostasis. This protein functions as a cellular oxygen sensor, and under normal oxygen concentration, modification by prolyl hydroxylation is a key regulatory event that targets HIF subunits for proteasomal destruction via the von Hippel-Lindau ubiquitylation complex. Mutations in this gene are associated with erythrocytosis familial type 3 (ECYT3).

Overview

Product Name	Anti-PHD2/EGLN1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-PHD2/EGLN1 Antibody Picoband® catalog # A00415-1. Tested in WB, IP, Flow Cytometry 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	Flow Cytometry, IP, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
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	Q9GZT9

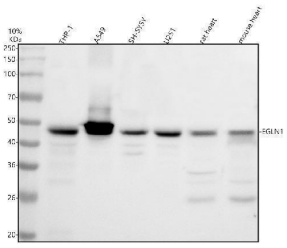
Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human PHD2/EGLN1. Human PHD2/EGLN1 shares 100% amino acid (aa) sequence identity with both mouse and rat PHD2/EGLN1.
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 Immunoprecipitation, 0.5-2 ug/ml, Human Flow Cytometry (Fixed), 1-3 ug/1x10^6 cells, Human

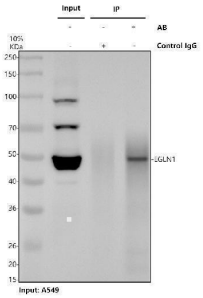
BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

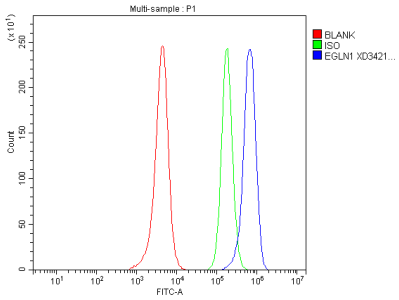
Anti-PHD2/EGLN1 Antibody Picoband® (A00415-1) Images



Western blot analysis of PHD2/EGLN1 using anti-PHD2/EGLN1 antibody (A00415-1). 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 THP-1 whole cell lysates, Lane 2: human A549 whole cell lysates, Lane 3: human SH-SY5Y whole cell lysates, Lane 4: human U251 whole cell lysates, Lane 5: rat heart tissue lysates, Lane 6: mouse heart 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-PHD2/EGLN1 antigen affinity purified polyclonal antibody (A00415-1) 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 PHD2/EGLN1 at approximately 46 kDa. The expected band size for PHD2/EGLN1 is at 46 kDa.



Immunoprecipitating PHD2/EGLN1 in A549 whole cell lysate. Western blot analysis of PHD2/EGLN1 using anti-PHD2/EGLN1 antibody (A00415-1). Lane 1: A549 whole cell lysates (30ug), Lane 2: Rabbit control IgG instead of anti-PHD2/EGLN1 antibody in A549 whole cell lysate, Lane 3: anti-PHD2/EGLN1 antibody (2ug) + A549 whole cell lysate (500ug). After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-PHD2/EGLN1 antigen affinity purified polyclonal antibody (A00415-1) at a dilution of 0.5 ug/mL and probed with a mouse anti-rabbit IgG-HRP secondary antibody (Catalog # BM2007). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for PHD2/EGLN1 at approximately 46 kDa. The expected band size for PHD2/EGLN1 is at 46 kDa.



Flow Cytometry analysis of SH-SY5Y cells using anti-PHD2/EGLN1 antibody (A00415-1). Overlay histogram showing SH-SY5Y cells stained with A00415-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PHD2/EGLN1 Antibody (A00415-1, 1 ug/1x106 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x106 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank

control.

Anti-PHD2/EGLN1 Antibody

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