Anti-Rubicon / Baron Antibody [PSH08-25] - BSA and Azide free

HA751216

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Monkey
Applications:	WB
Molecular Wt:	Predicted band size: 109 kDa
Clone number:	PSH08-25

Description: Rubicon (run domain Beclin-1-interacting and cysteine-rich domain-containing protein) is a protein that in humans is encoded by the RUBCN gene. Rubicon is one of the few known negative regulators of autophagy, a cellular process that degrades unnecessary or damaged cellular components. Rubicon is recruited to its sites of action through interaction with the small GTPase Rab7, and impairs the autophagosome-lysosome fusion step of autophagy through inhibition of PI3KC3-C2 (class III phosphatidylinositol 3-kinase complex 2). Negative modulation of Rubicon is associated with reduction of aging and aging-associated diseases: knockout of Rubicon increases lifespan in roundworms and female fruit flies, and in mice decreases kidney fibrosis and α-synuclein accumulation. In addition to regulation of autophagy, Rubicon has been shown to be required for LC3-associated phagocytosis (LAP) and LC3-associated endocytosis (LANDO). Rubicon has also been shown to negatively regulate the innate immune response through direct interaction with multiple downstream regulatory molecules.

Immunogen: Recombinant protein within human Rubicon aa 1-350.

Positive control: Raji cell lysate, A549 cell lysate, NCI-H1299 cell lysate, HeLa cell lysate, 293T cell lysate, COS-1 cell lysate, RAW264.7 cell lysate, NIH/3T3 cell lysate, C6 cell lysate, Mouse spleen tissue lysate.

Subcellular location: Late endosome, Lysosome, Early endosome.

Database links: SwissProt: Q92622 Human | Q80U62 Mouse
Entrez Gene: 303885 Rat

Recommended Dilutions:

WB	1:2,000

Storage Buffer: 1*PBS (pH7.4).

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

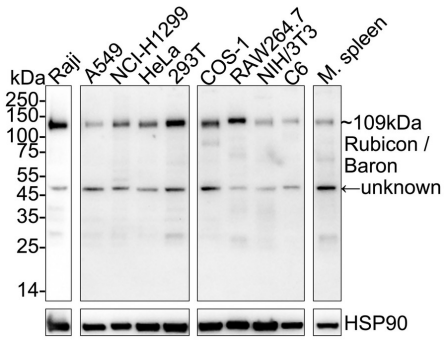

Fig1: Western blot analysis of Rubicon / Baron on different lysates with Rabbit anti-Rubicon / Baron antibody (HA751216) at 1/2,000 dilution.

Lane 1: Raji cell lysate
Lane 2: A549 cell lysate
Lane 3: NCI-H1299 cell lysate
Lane 4: HeLa cell lysate
Lane 5: 293T cell lysate
Lane 6: COS-1 cell lysate
Lane 7: RAW264.7 cell lysate
Lane 8: NIH/3T3 cell lysate
Lane 9: C6 cell lysate
Lane 10: Mouse spleen tissue lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 109 kDa
Observed band size: 109 kDa

Exposure time: Lane 1: 18 seconds; Lane 2-10: 1 minute 16 seconds; ECL: K1802;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA751216) at 1/2,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Background References

1. Minami S et al. Rubicon in Metabolic Diseases and Ageing. Front Cell Dev Biol. 2022 Jan
2. Liao S et al. HECTD1-Mediated Ubiquitination and Degradation of Rubicon Regulates Autophagy and Osteoarthritis Pathogenesis. Arthritis Rheumatol. 2023 Mar