

Anti-Rubicon / Baron Antibody [PSH08-25]



HA722969

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: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

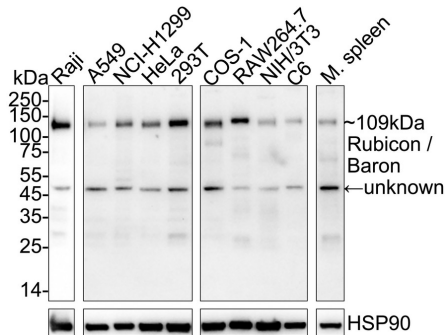
Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn

Images

Fig1: Western blot analysis of Rubicon / Baron on different lysates with Rabbit anti-Rubicon / Baron antibody (HA722969) 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 (HA722969) at 1/2,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

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

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
 HUABIO
 www.huabio.cn