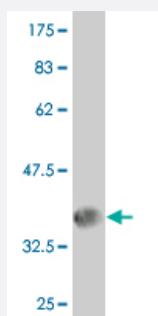


TCIRG1 monoclonal antibody (M01), clone 6H3

Catalog # H00010312-M01

Size 100 ug

Applications



Western Blot detection against Immunogen (36.74 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant TCIRG1.
Immunogen	TCIRG1 (AAH18133, 121 a.a. ~ 220 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	QLHQLQLHAAVLRQGHEPQLAAAHTDGASERTPLLQAPGGPHQDLRVNFVAGAVEPHKAPALE RLLWRACRGFLIASFRELEQPLEHPVTGEPATWMTFL
Host	Mouse
Reactivity	Human
Isotype	IgG2a Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Recombinant protein)

[Protocol Download](#)

- ELISA

Gene Info — TCIRG1

Entrez GeneID [10312](#)

GeneBank Accession# [BC018133](#)

Protein Accession# [AAH18133](#)

Gene Name TCIRG1

Gene Alias ATP6N1C, ATP6V0A3, Atp6i, OC-116kDa, OC116, OPTB1, Stv1, TIRC7, Vph1, a3

Gene Description T-cell, immune regulator 1, ATPase, H⁺ transporting, lysosomal V0 subunit A3

Omim ID [259700 604592](#)

Gene Ontology [Hyperlink](#)

Gene Summary Through alternate splicing, this gene encodes two proteins with similarity to subunits of the vacuolar ATPase (V-ATPase) but the encoded proteins seem to have different functions. V-ATPase is a multisubunit enzyme that mediates acidification of eukaryotic intracellular organelles. V-ATPase dependent organelle acidification is necessary for such intracellular processes as protein sorting, zymogen activation, and receptor-mediated endocytosis. V-ATPase is comprised of a cytosolic V1 domain and a transmembrane V0 domain. Mutations in this gene are associated with infantile malignant osteopetrosis. [provided by RefSeq]

Other Designations ATPase, H⁺ transporting, 116kD|T cell immune response cDNA7 protein|T-cell immune regulator 1|T-cell, immune regulator 1|T-cell, immune regulator 1, ATPase, H⁺ transporting, lysosomal V0 protein A3|T-cell, immune regulator 1, ATPase, H⁺ transporting, lyso

Publication Reference

- [Generation of Gene-Corrected Functional Osteoclasts From Osteopetrotic Induced Pluripotent Stem Cells.](#)

Xiaojie Xian, Roksana Moraghebi, Henrik Löfvall, Anders Fasth, Kim Henriksen, Johan Richter, Niels-Bjarne Woods, Ilana Moscatelli.

Stem Cell Research & Therapy 2020 May; 11(1):179.

Application: WB-Ce, Human, Induced pluripotent stem cells

- [Expanded circulating hematopoietic stem/progenitor cells as novel cell source for the treatment of TCIRG1 osteopetrosis.](#)

Capo V, Penna S, Merelli I, Barcella M, Scala S, Basso-Ricci L, Draghici E, Palagano E, Zonari E, Desantis G, Uva P, Cusano R, Sergi L, Crisafulli L, Moshous D, Stepensky P, Drabko K, Kaya Z, Unal E, Gezdirici A, Menna G, Serafini M, Aiuti A, Locatelli SL, Carlo-Stella C, Schulz AS, Ficara F, Sobacchi C, Gentner B, Villa A.

Haematologica 2021 Jan; 106(1):74.

Application: WB-Ce, Human, Human osteoclasts

- [A specific subtype of osteoclasts secretes factors inducing nodule formation by osteoblasts.](#)

Henriksen K, Andreassen KV, Thudium CS, Gudmann KN, Moscatelli I, Crüger-Hansen CE, Schulz AS, Dziegiel MH, Richter J, Karsdal MA, Neutzsky-Wulff AV.

Bone 2012 Jul; 51(3):353.

Application: WB, Human, Osteoblasts from IMO patients

- [Impaired gastric acidification negatively affects calcium homeostasis and bone mass.](#)

Schinke T, Schilling AF, Baranowsky A, Seitz S, Marshall RP, Linn T, Blaeker M, Huebner AK, Schulz A, Simon R, Gebauer M, Priemel M, Kornak U, Perkovic S, Barvencik F, Beil FT, Del Fattore A, Frattini A, Streichert T, Pueschel K, Villa A, Debatin KM, Rueg.

Nature Medicine 2009 Jun; 15(6):674.

Application: IHC, Human, Human tissues microarray

- [Differential Localization of Vacuolar H⁺-ATPases Containing α1, α2, α3, or α4 \(ATP6V0A1-4\) Subunit Isoforms Along the Nephron.](#)

Schulz N, Dave MH, Stehberger PA, Chau T, Wagner CA.

Cellular Physiology and Biochemistry 2007 Jan; 20(1-4):109.

Application: IHC-Fr, WB-Ti, Mouse, Mouse brain, kidney

Pathway

- [Epithelial cell signaling in Helicobacter pylori infection](#)
- [Lysosome](#)
- [Metabolic pathways](#)
- [Oxidative phosphorylation](#)
- [Vibrio cholerae infection](#)

Disease

- [Genetic Predisposition to Disease](#)
- [Osteopetrosis](#)
- [Osteoporosis](#)