BOSTER BIOLOGICAL TECHNOLOGY Co.,Ltd.
3942 B Valley Ave, Pleasanton, CA, 94566
Phone: 888-466-3604 Fax: 925-215-2184 Email: boster@bosterbio.com Web: www.bosterbio.com

Polyclonal Anti-IL3RA Antibody

Catalog Number: PA1617

Description

Gene Name	interleukin 3 receptor, alpha (low affinity)
Recommended Protein Name	Interleukin-3 receptor subunit alpha
Lot No.	0161212c011731
Size	100μg/vial
Form	lyophilized
Ig type	Rabbit IgG
Specificity	No cross reactivity with other proteins.
Purification	Immunogen affinity purified.
Species	**Reacts with:** human
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human IL3RA(135-151aa QYDLYLNVANRRQQYEC).
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na_2HPO_4, 0.05mg Thimerosal, 0.05mg NaN_3.

Application

	Concentration	Tested Species	Predicted Species	Antigen Retrieval
Western blot	0.1-0.5μg/ml	Hu	-	-

Tested Species: In-house tested species with positive results.

Predicted Species: Species predicted to be fit for the product based on sequence similarities.

Other applications have not been tested.

Optimal dilutions should be determined by end users.

Preparation and storage

Reconstitution: 0.2ml of distilled water will yield a concentration of 500μg/ml.

Storage: At -20˚C for one year. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for a longer time.
Avoid repeated freezing and thawing.

Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB.

Background

IL3RA(INTERLEUKIN 3 RECEPTOR, ALPHA), also called CD123 (Cluster of Differentiation 123), is a human gene. The protein encoded by this gene is an interleukin 3 specific subunit of a heterodimeric cytokine receptor which is composed of a ligand specific alpha subunit and a signal transducing beta subunit shared by the receptors for interleukin 3 (IL3), colony stimulating factor 2 (CSF2/GM-CSF), and interleukin 5 (IL5).The IL3RA is mapped on Xp22.33. The genomic structures of IL3RA and CSF2RA are very similar and share an additional exon encoding part of the C-terminal domain not found in other members of this gene family. As in human hematopoietic cells, IL3 and GMCSF competed for binding in fibroblasts expressing the cDNAs for IL3RA, CSF2RA, and the common beta subunit, indicating that different alpha subunits compete for a common beta subunit.

Reference

1. Itoh, N., Yonehara, S., Schreurs, J., Gorman, D. M., Maruyama, K., Ishii, A., Yahara, I., Arai, K., Miyajima, A. Cloning of an interleukin-3 receptor gene: a member of a distinct receptor gene family. Science 247: 324-327, 1990.
2. Kitamura, T., Sato, N., Arai, K., Miyajima, A. Expression cloning of the human IL-3 receptor cDNA reveals a shared beta-subunit for the human IL-3 and GM-CSF receptors. Cell 66: 1165-1174, 1991.