

Product datasheet for TA386524

IL3RA Mouse Monoclonal Antibody [Clone ID: 7G3]

Product data:

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product Type:	Primary Antibodies
Clone Name:	7G3
Applications:	BI, FC, IP, WB
Reactivity:	Human
Host:	Mouse
lsotype:	IgG2a, kappa
Clonality:	Monoclonal
Immunogen:	The original antibody was generated by intraperitoneally immunizing BALB/c mice with 5 X lo6 COS cells transfected with the IL-3R a-chain in combination with adjuvant peptides.
Specificity:	This antibody specifically binds to the IL-3R alpha-chain and completely abolishes its function. IL-3R is expressed on myeloid, lymphoid, and vascular endothelial cells, where it transduces IL-3-dependent signals leading to cell activation.
	This antagonist antibody binds IL-3Rα and blocks IL-3 binding and IL-3-mediated functions. mAb 7G3 immunoprecipitated and recognized in western blots the IL-3R α chain expressed by transfected cells and bound to primary cells expressing IL-3Rα. The expression of IL-3Rα chain on various cells types was analysed by flow cytometry using this antibody (PMID: 8547680). It is reported that 7G3 inhibits IL-3Rα and βc dimerization (PMID: 8649415). This antibody was used in the study of neutrophils expressing IL-3 receptors which are activated by granulocyte-macrophage colony-stimulating factor or GM-CSF (PMID: 7579364). The original 7G3, mouse IgG2a antibody inhibited IL-3-mediated intracellular signaling of isolated acute myeloid leukemia (AML) CD34+ CD38- cells in vitro and reduced their survival (PMID: 19570512). Humanized version of this antibody CSL362 is available on request. CSL362, retains the ability to neutralise IL-3 and has enhanced affinity for the FcyRIIIa (CD16) on NK cells. In vitro studies have demonstrated that the increased affinity for CD16 correlates with greater antibody-dependent cell-mediated cytotoxicity (ADCC) against CD123 expressing cell lines (Busfield et al., 2012). CSL362 is being accessed for use in the treatment of myeloid leukemia (PMID: 24363400, 2524888, 26130514).
Formulation:	PBS with 0.02% Proclin 300.
Concentration:	lot specific



This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

	IL3RA Mouse Monoclonal Antibody [Clone ID: 7G3] – TA386524
Conjugation:	Unconjugated
Storage:	Please store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C. Avoid freeze and thaw cycles.
Stability:	3 years from dispatch.
Gene Name:	interleukin 3 receptor subunit alpha
Database Link:	Entrez Gene 3563 Human P26951
Synonyms:	CD123; hIL-3Ra; IL-3R-alpha; IL3R; IL3RAY; IL3RX; IL3RY; MGC34174

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US