

## OriGene Technologies, Inc.

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## Product datasheet for DDX0300P-100

**IL3RA Mouse Monoclonal Antibody [Clone ID: 107D2.08]** 

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: 107D2.08
Applications: FC, IHC, IP

**Recommend Dilution:** DDX0300P-50 DDX0300P-100 Purified: FACS surface, ImmunoHistoChemistry frozen

sections, ImmunoHistoChemistry paraffin sections, Immunoprecipitation.

DDX0300A488-50 DDX0300A488-100 AlexaFluor®488: FACS surface, Immunofluorescence.

DDX0300A546-50 DDX0300A546-100 AlexaFluor®546: Immunofluorescence.

<u>DDX0300A647-50 DDX0300A647-100</u> AlexaFluor®647: Surface and Intracyto Flow cytometry <u>DDX0300B-50 DDX0300B-100</u> Biotin: Immunoprecipitation, ImmunoHistoChemistry paraffin

sections, ImmunoHistoChemistry frozen sections.

**Usage recommendation:** 

\*This monoclonal antibody may be used between 5-20 µg/ml.

\*Optimal dilution should be determined by each laboratory for each application.

\*Coupled antibody: to maintain RT before use.

**Reactivity:** Canine, Human

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** sorted human tonsillar pDC

Specificity: Human CD123 (IL3Ra).

**Species cross-reactivity:** Dog.

**Formulation:** Purified: 100 μg in 200 μl / 50 μg in 100 μl Tris-NaCl pH 8.

**Coupled:** 100 μg in 200μl / 50 μg in 100 μl PBS 50% glycerol.

State: Purified

**Concentration:** 0.5 mg/ml

**Purification:** QMA Hyper D ion exchange chromatography

**Gene Name:** interleukin 3 receptor subunit alpha

Database Link: <u>Entrez Gene 3563 Human</u>





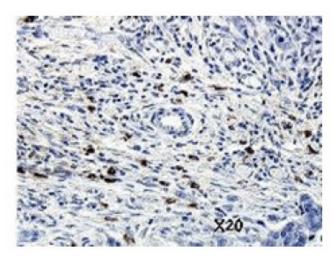
Background:

IL3 exerts its biologic activity through its interaction with a cell surface receptor that consists of two subunits. The α subunit (CD123) specifically binds IL3, whereas the b subunit is required for signaling and is common to the GMCSFR and IL5-R. **107D2.08** and **106C2.02** mAbs were obtained after mouse immunization with sorted human tonsillar PDC. Both clones strongly stain PDCs and basophils, weakly stain monocytes, CD34+ derived DCs and CD11c+ DC, while no staining is observed on T, B, NK cells as well as on mono-derived DCs. Staining with **107D2.08** and **106C2.02** mAbs are maintained on sorted PDC cultured in the presence of IL3 and CD40L, but lost when IL3 alone is added to the culture. The recognition of the IL3Ra chain by 107D2.08 and 106C2.02 was confirmed by transfection studies. **107D2.08** appeared to be the most appropriate clone for in situ studies. **107D2.08** allowed the first observation of IL3Ra+ cells in breast tumor microenvironment. (*Bendriss-Vermare N thesis, 2001;Treilleux I et al, 2004 ; Clin. Canc. Res., 10: 7466-7474*).

Synonyms:

Interleukin-3 receptor subunit alpha, IL-3R-alpha, IL3 receptor alpha

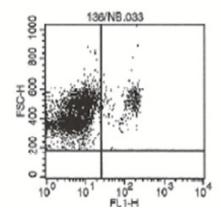
## **Product images:**



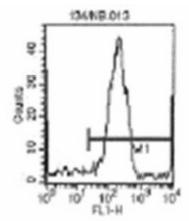
IHC staining of Bouin Paraffin section of human invasive breast tumor with 107D2.08 (DAB brown)



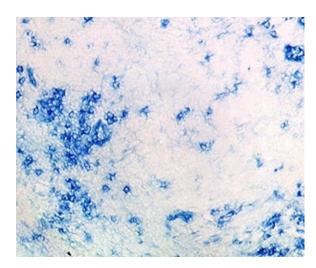




Human PBMC enriched in monocytes and dendritic cells (Percollgradient) and analyzed by surface flow cytometry



Facs staining of CD11c- sorted tonsillar cells Control IgG1 106C2.02 107D2.08



IHC staining of human tonsil frozen section with clone 107D2 (DX0300)



