APB505Mu02 100μg
Active Interleukin 3 Receptor Alpha (IL3Ra)
Organism Species: *Mus musculus (Mouse)*
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: His167~Lys331
Tags: N-terminal His-tag
Purity: >95%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.
Applications: Cell culture; Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 6.4
Predicted Molecular Mass: 19.2kDa
Accurate Molecular Mass: 20kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.
Store at 2-8°C for one month.
Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37ºC for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

HYHS LDVNTAGPAP
HGGHEGCTLD LDTVLGSTPN SPDLVPQVTI TVNGSGRAGP VPCMDNTVDL QRAEVLAPPT
LTVECNGSEA HARWVARNRF HHGLLGYTLQ VNQSSRSEPQ EYNVSIPHFW VPNAGAISFR
VKSRSEVYPR KLSSWSEAWG LVCPPEVMPV K

[ACTIVITY]

Interleukin 3 receptor alpha (IL3Ra), also known as CD123 (Cluster of Differentiation 123), is a subunit of the functional high-affinity mouse IL-3 receptor which is a heterodimer. The alpha subunit alone binds IL-3 with low affinity. The beta subunit does not bind IL-3 by itself but is required for the high-affinity binding of IL-3 to the heterodimeric receptor complex. Both the alpha and the beta subunits are members of the cytokine receptor superfamily. A binding ELISA assay was conducted to detect the interaction of recombinant mouse Interleukin 3 Receptor Alpha and recombinant mouse Interleukin 3. Briefly, IL3Ra were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to IL3-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-IL3Ra pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50µL stop solution to the wells and read at 450nm immediately. The binding activity of IL3Ra and IL3 was shown in Figure 1, the EC50 was 0.173ug/ml.

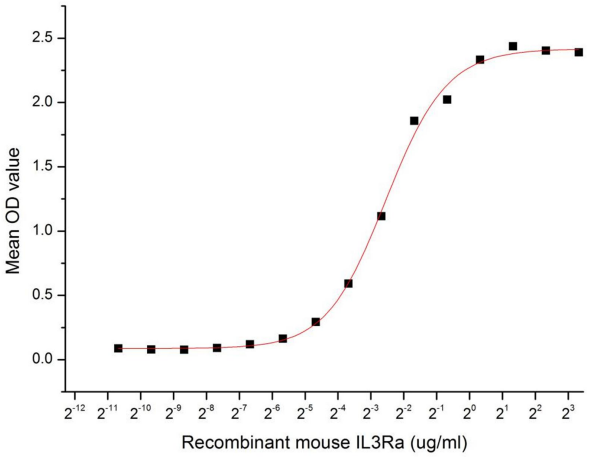

Figure 1. The binding activity of IL3Ra with IL3

[IDENTIFICATION]

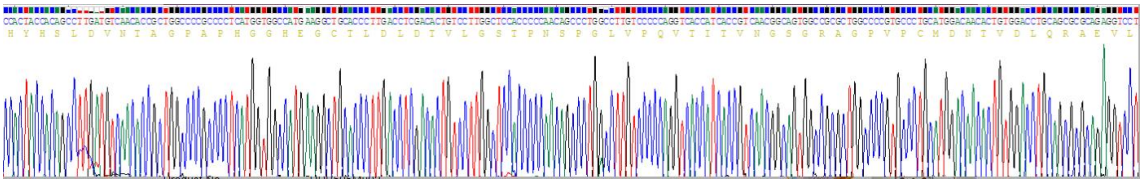

Figure 2. Gene Sequencing (extract)

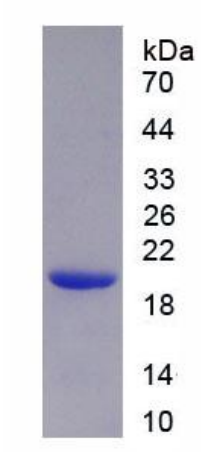

Figure 3. SDS-PAGE

Sample: Active recombinant IL3Ra, Mouse

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.