

APA545Hu01 100µg

Active Immunoglobulin E (IgE)

Organism Species: *Homo sapiens* (Human)

Instruction manual

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Ala1~Lys428

Tags: N-terminal His-tag

Purity: >90%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 5%Trehalose .

Original Concentration: 200µg/mL

Applications: Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 8.4

Predicted Molecular Mass: 50.7kDa

Accurate Molecular Mass: 51kDa 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 37°C 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]

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ASTQSPSVFP LTRCCKNIPS NATSVTLGCL ATGYFPEPVM VTWDTGSLNG
TTMTLPATTL TLSGHYATIS LLTVSGAWAK QMFTCRVAHT PSSTDWVDNK
TFSVCSRDFP PPTVKILQSS CDGGGHFPPT IQLLCLVSGY TPGTINITWL
EDGQVMDVDL STASTTQEGE LASTQSELTL SQKHWLSDRT YTCQVTYQGH
TFEDSTKKCA DSNPRGVSAY LSRPSPFDLF IRKSPTITCL VVDLAPSKGT
VNLTWSRASG KPVNHSTRKE EKQRNGTLTV TSTLPGVTRD WIEGETYQCR
VTHPHLPRAL MRSTTKTSGP RAAPEVYafa TPEWPGSRDK RTLACLIQNF
MPEDISVQWL HNEVQLPDAR HSTTQPRKTK GSGFFVFSRL EVTRAWEQK
DEFICRAVHE AASPSQTVQR AVSVNPGK
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[ACTIVITY]

Immunoglobulin E (IgE) is one of the members the 5 classes of immunoglobulins (IgM, IgG, IgD, IgA, IgE). It is produced by plasma cells and accounts for less than 0.01% of the total immunoglobulin. IgE has a unique chemical structure and various physiological functions, such as type I hypersensitivity reactions, parasitic infections, autoimmune processes, and venom protection. Besides, Cluster of Differentiation 79B (CD79B) has been identified as an interactor of IgE, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human IgE and recombinant human CD79B. Briefly, IgE was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to CD79B-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-IgE pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37°C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 μ L stop solution to the wells and read at 450/630nm

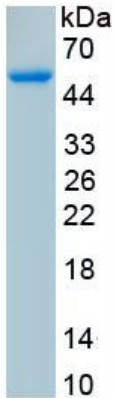


Figure 3. SDS-PAGE

Sample: Active recombinant IgE, Human

[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.