# abcam

### **Product datasheet**

## Monkey IL-8 ELISA Kit ab242232

Recombinant SimpleStep ELISA

6 Images

Overview

**Product name** 

**Detection method** 

**Precision** 

Monkey IL-8 ELISA Kit

Colorimetric

Sample Mean SD CV% n Serum 8 5.1%

Inter-assay

Intra-assay

Sample	n	Mean	SD	CV%
serum	3			2.5%

Sample type

Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cerebral Spinal Fluid

Assay type

Sandwich (quantitative)

Sensitivity

2.3 pg/ml

Range

4.7 pg/ml - 300 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	95	90% - 98%
Serum	96	92% - 101%
Cell culture media	112	107% - 121%
Hep Plasma	102	92% - 114%
EDTA Plasma	82	76% - 91%
Cerebral Spinal Fluid	104	94% - 115%

Assay time 1h 30m

**Assay duration** One step assay

Species reactivity Reacts with: Monkey, Cynomolgus monkey, Rhesus monkey

Product overview

Monkey IL-8 ELISA Kit (ab242232) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of IL-8 protein in cell culture supernatant, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Monkey IL-8 with 2.3

pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (<u>ab203359</u>) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

**Platform** 

Pre-coated microplate (12 x 8 well strips)

#### **Properties**

Storage instructions

Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Monkey IL-8 Capture Antibody	1 x 600µl
10X Monkey IL-8 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BI	1 x 6ml
Monkey IL-8 Lyophilized recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

Function IL-8 is a chemotactic factor that attracts neutrophils, basophils, and T-cells, but not monocytes. It is

also involved in neutrophil activation. It is released from several cell types in response to an inflammatory stimulus. L-8(6-77) has a 5-10-fold higher activity on neutrophil activation, L-8(5-77) has increased activity on neutrophil activation and L-8(7-77) has a higher affinity to receptors

CXCR1 and CXCR2 as compared to IL-8(1-77), respectively.

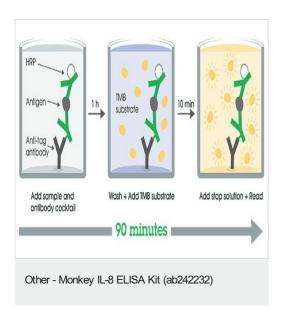
**Sequence similarities**Belongs to the intercrine alpha (chemokine CxC) family.

**Post-translational** Several N-terminal processed forms are produced by proteolytic cleavage after secretion from at modifications least peripheral blood monocytes, leukcocytes and endothelial cells. In general, IL-8(1-77) is

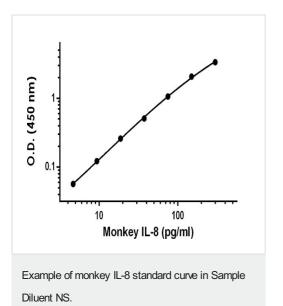
referred to as interleukin-8. IL-8(6-77) is the most promiment form.

Cellular localization Secreted.

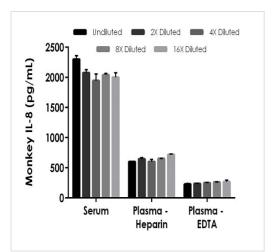
#### **Images**



SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

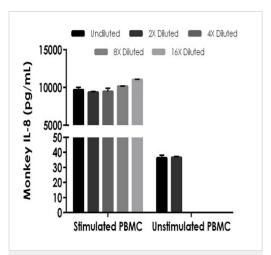


The IL-8 standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.



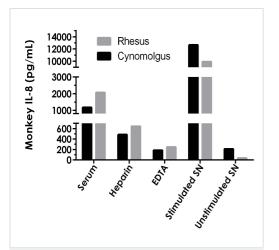
Interpolated concentrations of native IL-8 in monkey serum and plasma samples.

The concentrations of IL-8 were measured in duplicates, interpolated from the IL-8 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 10%, plasma (heparin) 50%, and plasma (EDTA) 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IL-8 concentration was determined to be 2,072 pg/mL in neat serum, 644.2 pg/mL in neat plasma (heparin), and 248.7 pg/mL in neat plasma (EDTA).



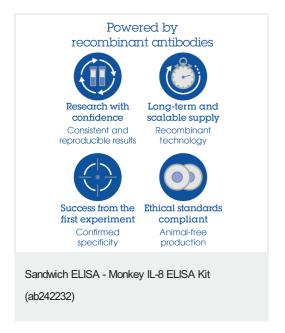
Interpolated concentrations of native IL-8 in stimulated and unstimulated Rhesus macaque peripheral blood mononuclear cell (PBMC) supernatant samples.

Rhesus macaque PBMCs were cultured in the presence (stimulated) or absence (unstimulated) of 50 ng/mL PMA and 1 µg/mL ionomycin for 24 hours. The concentrations of IL-8 were measured in duplicates, interpolated from the IL-8 standard curves and corrected for sample dilution. Undiluted samples are as follows: stimulated PBMC supernatant 3%, and unstimulated PBMC supernatant 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IL-8 concentration was determined to be 9,926 pg/mL in neat stimulated PBMC cell culture supernatant and 36.36 pg/mL in neat unstimulated PBMC cell culture supernatant. IL-6 was undetectable in naive cell culture media (not shown).



Comparison of rhesus macaque and cynomolgus monkey serum, plasma, and PMA + lonomycin stimulated and unstimulated PBMC cell culture supernatants (SN) (24 hours).

The concentrations of IL-8 were measured in duplicates, interpolated from the IL-8 standard curves and corrected for sample dilution. The interpolated dilution factor corrected values in neat samples are plotted (mean +/- SD, n=2) and also shown in the table below.



To learn more about the advantages of recombinant antibodies see **here**.

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