

Product datasheet

Bovine IL-4 ELISA Kit ab277388

1 Image

Overview

Product name Bovine IL-4 ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
--------	---	------	----	-----

Overall < 10%

Inter-assay

Sample	n	Mean	SD	CV%
--------	---	------	----	-----

Overall < 12%

Sample type Cell culture supernatant, Serum, Plasma

Assay type Sandwich (quantitative)

Sensitivity 8 pg/ml

Range 8 pg/ml - 2000 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Serum	127.3	105% - 141%
Plasma	120.3	101% - 140%
Cell culture media	97.79	83% - 117%

Assay duration Multiple steps standard assay

Species reactivity **Reacts with:** Cow

Product overview Bovine IL-4 ELISA Kit (ab277388) is an *in-vitro* enzyme-linked immunosorbent assay for the quantitative measurement of Bovine IL-4 in serum (Bovine IL-4 concentration is low in normal serum/plasma, and may not be detectable in this assay), plasma and cell culture supernatants.

This assay employs an antibody specific for Bovine IL-4 coated on a 96-well plate. Standards and samples are pipetted into the wells and Bovine IL-4 present in a sample is bound to the wells by the immobilized antibody. The wells are washed, and biotinylated anti-Bovine IL-4 antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of Bovine IL-4 bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

Tested applications

Suitable for: Sandwich ELISA

Platform

Pre-coated microplate (12 x 8 well strips)

Properties

Storage instructions Store at -20°C. Please refer to protocols.

Components	1 x 96 tests
150X HRP-Streptavidin Concentrate	1 x 200µl
20X Wash Buffer Concentrate	1 x 25ml
5X Assay Diluent B	1 x 15ml
Assay Diluent C	1 x 30ml
Biotinylated Anti-Bovine IL-4 Antibody	2 vials
Anti-Bovine IL-4 coated Microplate	1 unit
Bovine IL-4 standard protein (Lyophilized)	2 vials
Stop Solution	1 x 8ml
TMB One-Step Substrate Reagent	1 x 12ml

Function

Participates in at least several B-cell activation processes as well as of other cell types. It is a costimulator of DNA-synthesis. It induces the expression of class II MHC molecules on resting B-cells. It enhances both secretion and cell surface expression of IgE and IgG1. It also regulates the expression of the low affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes.

Involvement in disease

Genetic variations in IL4 may be a cause of susceptibility to ischemic stroke (ISCHSTR) [MIM:601367]; also known as cerebrovascular accident or cerebral infarction. A stroke is an acute neurologic event leading to death of neural tissue of the brain and resulting in loss of motor, sensory and/or cognitive function. Ischemic strokes, resulting from vascular occlusion, is considered to be a highly complex disease consisting of a group of heterogeneous disorders with multiple genetic and environmental risk factors.

Sequence similarities

Belongs to the IL-4/IL-13 family.

Cellular localization

Secreted.

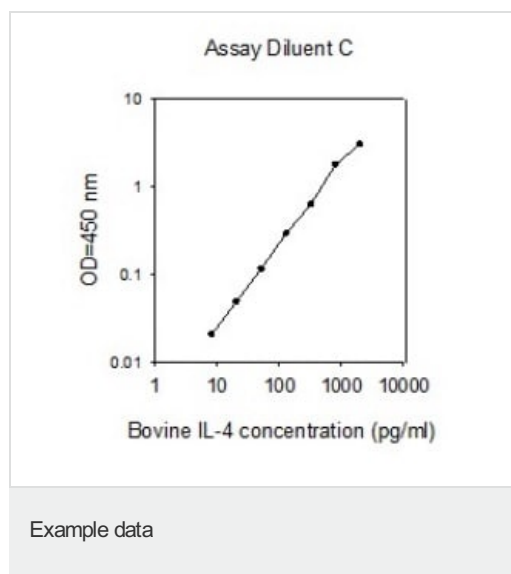
Applications

Our [Abpromise guarantee](#) covers the use of **ab277388** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Sandwich ELISA		Use at an assay dependent concentration.

Images



These standard curves are for demonstration only. A standard curve must be run with each assay.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors