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Datasheet for ABIN6385093

**Activin A Receptor Type IB/ALK-4 IQ-ELISA Kit**

## Overview

Quantity:	96 tests
Target:	Activin A Receptor Type IB/ALK-4 (ACVR1B)
Reactivity:	Human
Method Type:	Sandwich ELISA
Application:	ELISA

## Product Details

Purpose:	Human Immunoquantitative (PCR-Based) Activin R1B ELISA Kit for cell culture supernatants, plasma, and serum samples.
Sample Type:	Cell Culture Supernatant, Plasma, Serum
Analytical Method:	Semi-Quantitative
Detection Method:	qPCR
Characteristics:	<p>IQ-ELISAs employ specific capture antibodies coated on a 96-well PCR plate. Standards and samples are pipetted into the wells, the target protein in the standards and samples binds to the immobilized antibody. The wells are washed and the detection affinity reagent is added to the wells where it binds to any captured antigen. The wells are washed, and primers and PCR master mix are added to each well. The plate is placed into a real time PCR instrument for cycling and measurement of DNA amplification. The cycle number where amplification is detected is proportional to the amount of affinity detection reagent that bound to captured antigen in each well.</p>
Components:	<ul style="list-style-type: none"><li>• Activin R1B Microplate (Item A): 96 well PCR plate coated with anti-Human Activin R1B</li></ul>

## Product Details

- Wash Buffer I Concentrate (20x) (Item B): 25 ml of 20x concentrated solution
- Standards (Item C): 2 vials of recombinant Human Activin R1B
- Assay Diluent A (Item D): 30 ml diluent buffer, 0.09% sodium azide as preservative. For Standard/Sample (serum/plasma) diluent
- Assay Diluent B (Item E): 15 ml of 5x concentrated buffer. For Standard/Sample (cell culture medium/urine) diluent
- Detection Affinity Reagent for Activin R1B (Item F): 2 vials of a 4x concentrated solution of anti-Human Activin R1B affinity reagent
- IQELISA Detection Reagent (Item G): 1.4ml of a 10x concentrated stock
- Primer Solution (Item I): 1.7 ml vial
- PCR Master Mix (Item J): 1.2 ml vial
- PCR Preparation buffer (Item K): 1ml vial of 10x concentrated buffer
- Final Wash Buffer (Item L): 10ml vial of 10x concentrated buffer

### Material not included:

- Real-time PCR instrument, Bio-Rad recommended
- Precision pipettes to deliver 2 µL to 1 mL volumes
- Adjustable 1-25 mL pipettes for reagent preparation
- 100 mL and 1 liter graduated cylinders
- Absorbent paper
- Distilled or deionized water
- Log-log graph paper or computer and software for data analysis
- Tubes to prepare standard or sample dilutions
- Heating block or water bath capable of 80°C

## Target Details

Target: Activin A Receptor Type IB/ALK-4 (ACVR1B)

Alternative Name: Activin R1B ([ACVR1B Products](#))

Gene ID: 91

UniProt: [P36896](#)

## Application Details

Application Notes: The Immuno-Quantitative ELISA (IQELISA) kits are an innovative assay platform that combines the specificity and ease of use of an ELISA with the sensitivity of real-time PCR. This results in an assay that is simultaneously familiar and cutting edge and enables the use of only 1/10th the sample volume while also providing 10x more sensitivity than a traditional ELISA.

Comment: The Immuno-Quantitative ELISA (IQELISA™) kits are an innovative assay platform that combines the specificity and ease of use of an ELISA with the sensitivity of real-time PCR. Also

## Application Details

called immuno-PCR, this detection platform results in an assay that is simultaneously familiar and cutting edge. Compared to traditional ELISA, IQELISA™ enables the use of only 1/10th the sample volume while also providing 10x more sensitivity.

Sample Volume: 25 µL

Plate: Pre-coated

Protocol:

1. Prepare all reagents, samples and standards as instructed
2. Add 25 µL standard or sample to each well. Incubate for 2.5 hours at room temperature or overnight at 4°C
3. Add 25 µL detection affinity reagent to each well. Incubate 1 hour at room temperature
4. Add 25µL of IQELISA Detection Reagent to each well. Incubate 1 hour
5. Add 15µL Primer solution 10µL of PCR master mix to each well
6. Run real-time PCR

Restrictions: For Research Use only

## Handling

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: May be stored for up to 6 months at 2° to 8°C from the date of shipment. Standard (recombinant protein) should be stored at -20°C or -80°C (recommended at -80°C) after reconstitution. Opened PCR plate or reagents may be stored for up to 1 month at 2° to 8°C. Note: the kit can be used within one year if the whole kit is stored at -20°C. Avoid repeated freeze-thaw cycles.

Expiry Date: 6 months