

## Human Actin Alpha 2, Smooth Muscle (ACTA2) ELISA Kit

Catalogue No.: abx051200

Human Actin Alpha 2, Smooth Muscle (ACTA2) ELISA Kit is an ELISA Kit for the in vitro quantitative measurement of Human Actin Alpha 2, Smooth Muscle (ACTA2) concentrations in serum, plasma and other biological fluids.

<b>Target:</b>	Actin Alpha 2, Smooth Muscle (ACTA2)
<b>Reactivity:</b>	Human
<b>Tested Applications:</b>	ELISA
<b>Recommended dilutions:</b>	Optimal dilutions/concentrations should be determined by the end user.
<b>Storage:</b>	Shipped at 4 °C. Upon receipt, store the kit according to the storage instruction in the kit's manual.
<b>Validity:</b>	The validity for this kit is at least 6 months. Up to 12 months validity can be provided on request.
<b>Stability:</b>	The stability of the kit is determined by the rate of activity loss. The loss rate is less than 5% within the expiration date under appropriate storage conditions. To minimize performance fluctuations, operation procedures and lab conditions should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same user throughout.
<b>Test Range:</b>	0.625 ng/ml - 40 ng/ml
<b>Sensitivity:</b>	0.38 ng/ml
<b>Standard Form:</b>	Lyophilized
<b>Detection Method:</b>	Colorimetric
<b>Assay Type:</b>	Sandwich
<b>Assay Data:</b>	Quantitative
<b>Sample Type:</b>	Serum, plasma and other biological fluids.

## Kit Components:

The kit components listed are for reference only. The product manual may differ slightly. The product should be used as stated on the product manual included and delivered together with the product.

- Pre-coated 96-Well Microplate
- Standard
- Standard Diluent Buffer
- Wash Buffer
- Detection Reagent A
- Detection Reagent B
- Diluent A
- Diluent B
- TMB Substrate
- Stop Solution
- Plate Sealer

## Material Required But Not Provided:

- 37°C incubator
- Multi and single channel pipettes and sterile pipette tips
- Squirt bottle or automated microplate washer
- 1.5 ml tubes
- Distilled water
- Absorbent filter papers
- 100 ml and 1 liter graduated cylinders
- Microplate reader (wavelength: 450 nm)
- ELISA Shaker

## Assay Procedure:

This procedure is provided for reference only. The product manual may differ slightly. The product should be used as stated on the product manual included and delivered together with the product.

- 1) Set standard, test samples and control wells.
- 2) Aliquot 100 µl of diluted standard into the standard wells.
- 3) Aliquot 100 µl of Standard Diluent buffer into control (zero) well.
- 4) Aliquot 100 µl of diluted samples into the sample wells. Incubate for 1 hr at 37 °C.
- 5) Aliquot 100 µl of Detection Reagent A to each well. Incubate for 1 hr at 37 °C.
- 6) Wash 3 times.
- 7) Aliquot 100 µl of Detection Reagent B to each well. Incubate for 30 mins at 37 °C.
- 8) Wash 5 times.
- 9) Aliquot 90 µl of TMB Substrate to each well. Incubate for 10-20 mins at 37 °C.
- 10) Aliquot 50 µl of Stop Solution.
- 11) Measure the OD at 450 nm.

## Assay Precision:

Intra-assay Precision (Precision within an assay): 3 samples with low, medium and high levels of Actin Alpha 2, Smooth Muscle (ACTA2) were tested 20 times on one plate, respectively.

Inter-assay Precision (Precision between assays): 3 samples with low, medium and high levels of Actin Alpha 2, Smooth Muscle (ACTA2) were tested on 3 different plates, 8 replicates in each plate.

$CV (\%) = (\text{Standard Deviation} / \text{mean}) \times 100$

Intra-Assay: CV<10%

Inter-Assay: CV<10%

## Note:

THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES.

The range and sensitivity is subject to change. Please contact us for the latest product information. For accurate results, sample concentrations must be diluted to mid-range of the kit. If you require a specific range, please contact us in advance or write your request in your order comments.

Please note that our kits are optimised for detection of native samples, rather than recombinant proteins. We are unable to guarantee detection of recombinant proteins, as they may have different sequences or tertiary structures to the native protein.

For Reference Only