



Human RAC-alpha serine/threonine-protein kinase(AKT1) ELISA kit

Product Code	CSB-EL001553HU
Abbreviation	AKT1
Protein Biological Process 1	Apoptosis/Autophagy
Target Name	v-akt murine thymoma viral oncogene homolog 1
Uniprot No.	P31749
Alias	AKT, MGC99656, PKB, PKB-ALPHA, PRKBA, RAC, RAC-ALPHA, AKT1 kinase rac-alpha serine/threonine-protein kinase protein kinase B rac protein kinase alpha
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Apoptosis
Sample Types	serum, plasma, cell lysates
Detection Range	0.312 ng/mL-20 ng/mL
Sensitivity	0.078 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Signal Transduction
Gene Names	AKT1
Tag Info	quantitative
Protein Description	Sandwich
Description	This Human AKT1 ELISA Kit was designed for the quantitative measurement of Human AKT1 protein in serum, plasma, cell lysates. It is a Sandwich ELISA kit, its detection range is 0.312 ng/mL-20 ng/mL and the sensitivity is 0.078 ng/mL.
Target Details	The serine-threonine protein kinase encoded by the AKT1 gene is catalytically inactive in serum-starved primary and immortalized fibroblasts. AKT1 and the related AKT2 are activated by platelet-derived growth factor. The activation is rapid and specific, and it is abrogated by mutations in the pleckstrin homology



domain of AKT1. It was shown that the activation occurs through phosphatidylinositol 3-kinase. In the developing nervous system AKT is a critical mediator of growth factor-induced neuronal survival. Survival factors can suppress apoptosis in a transcription-independent manner by activating the serine/threonine kinase AKT1, which then phosphorylates and inactivates components of the apoptotic machinery. Multiple alternatively spliced transcript variants have been found for this gene.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of human AKT1 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

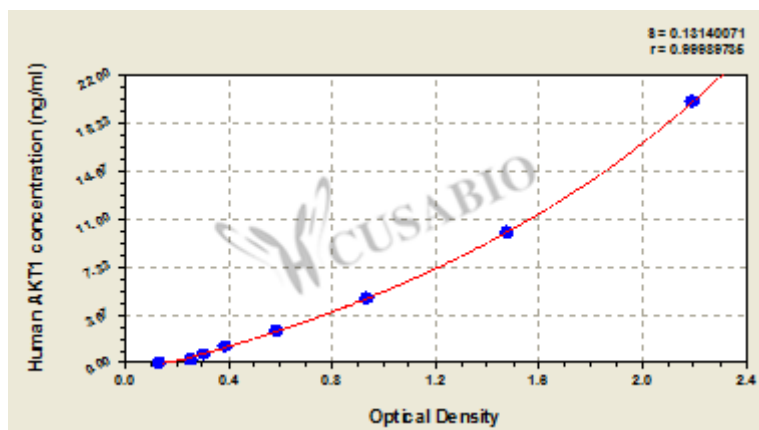
	Sample	Serum(n=4)
1:1	Average %	96
	Range %	93-99
1:2	Average %	87
	Range %	82-90
1:4	Average %	101
	Range %	98-104
1:8	Average %	90
	Range %	87-93

Recovery

The recovery of human AKT1 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

	Sample Type	Average % Recovery	Range
	Serum (n=5)	85	82-89
	EDTA plasma (n=4)	93	90-96

Typical



These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.

ng/ml	OD1	OD2	Average	Corrected
20	2.149	2.169	2.159	2.015
10	1.444	1.469	1.457	1.313
5	0.918	0.938	0.928	0.784
2.5	0.577	0.598	0.588	0.444
1.25	0.388	0.399	0.394	0.250
0.625	0.301	0.321	0.311	0.167
0.312	0.253	0.268	0.261	0.117
0	0.143	0.145	0.144	

Msds

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