



Rat Caspase 3, Casp-3 ELISA Kit

Product Code	CSB-E08857r
Abbreviation	CASP3
Protein Biological Process 1	Apoptosis/Autophagy
Target Name	caspase 3, apoptosis-related cysteine peptidase
Uniprot No.	P55213
Alias	CPP32, CPP32B, SCA-1, PARP cleavage protease SREBP cleavage activity 1 Yama apopain caspase 3 caspase 3, apoptosis-related cysteine protease cysteine protease CPP32 procaspase3
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Protein Biological Process 3	Apoptosis
Sample Types	serum, plasma, tissue homogenates
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	Cell Biology
Quality Control	A microplate reader capable of measuring absorbance at 450 nm, with the correction wavelength set at 540 nm or 570 nm. An incubator can provide stable incubation conditions up to 37°C±5° Centrifuge Vortex Squirt bottle, manifold dispenser, or automated microplate washer Absorbent paper for blotting the microtiter plate 50-300ul multi-channel micropipette Pipette tips Single-channel micropipette with different ranges 100ml and 500ml graduated cylinders Deionized or distilled water Timer Test tubes for dilution
Gene Names	Casp3



Tag Info	quantitative
Protein Description	Sandwich
Component	<p>A micro ELISA plate ---The 96-well plate has been pre-coated with an anti-Rat CASP3 antibody.</p> <p>Two vials lyophilized standard ---Dilute a bottle of the standard at dilution series, read the OD values, and then draw a standard curve.</p> <p>One vial Biotin-labeled CASP3 antibody (100 x concentrate) (120 µl/bottle) --- Act as the detection antibody.</p> <p>One vial HRP-avidin (100 x concentrate) (120 µl/bottle) ---Bind to the detection antibody and react with the TMB substrate to make the solution chromogenic.</p> <p>One vial Biotin-antibody Diluent (15 ml/bottle) ---Dilute the Biotin-antibody.</p> <p>One vial HRP-avidin Diluent (15 ml/bottle) ---Dilute the HRP-avidin solution.</p> <p>One vial Sample Diluent (50 ml/bottle) ---Dilute the sample to an appropriate concentration.</p> <p>One vial Wash Buffer (25 x concentrate) (20 ml/bottle) ---Wash away unbound or free substances.</p> <p>One vial TMB Substrate (10 ml/bottle) ---Act as the chromogenic agent. TMB interacts with HRP, eliciting the solution turns blue.</p> <p>One vial Stop Solution (10 ml/bottle) ---Stop the color reaction. The solution color immediately turns from blue to yellow.</p> <p>Four Adhesive Strips (For 96 wells) ---Cover the microplate when incubating.</p> <p>An instruction manual</p>

Description	<p>This Rat CASP3 ELISA Kit was designed for the quantitative measurement of Rat CASP3 protein in serum, plasma, tissue homogenates. 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 .</p>
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Target Details	<p>This gene encodes a protein which is a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce two subunits, large and small, that dimerize to form the active enzyme. This protein cleaves and activates caspases 6, 7 and 9, and the protein itself is processed by caspases 8, 9 and 10. It is the predominant caspase involved in the cleavage of amyloid-beta 4A precursor protein, which is associated with neuronal death in Alzheimer s disease. Alternative splicing of this gene results in two transcript variants that encode the same protein.</p>
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Product Precision	<p>Intra-assay Precision (Precision within an assay): CV%<8%</p> <p>Three samples of known concentration were tested twenty times on one plate to assess.</p> <p>Inter-assay Precision (Precision between assays): CV%<10%</p> <p>Three samples of known concentration were tested in twenty assays to assess.</p>
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Linearity



To assess the linearity of the assay, samples were spiked with high concentrations of rat Casp-3 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 %	84
	Range %	80-92
1:2	Average %	98
	Range %	91-105
1:4	Average %	99
	Range %	92-110
1:8	Average %	91
	Range %	86-98

Recovery

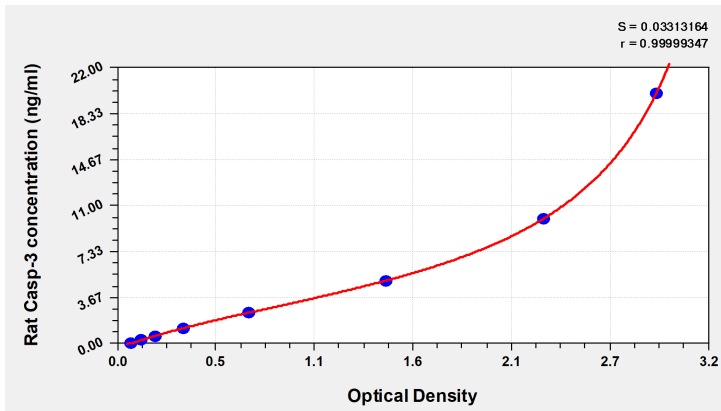
The recovery of rat Casp-3 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	95	89-98
EDTA plasma (n=4)	96	90-100

Sample Type Average % Recovery Range

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	2.915	2.903	2.909	2.828
10	2.321	2.283	2.302	2.221
5	1.467	1.444	1.456	1.375
2.5	0.727	0.706	0.717	0.636
1.25	0.365	0.359	0.362	0.281
0.625	0.216	0.206	0.211	0.130
0.312	0.137	0.129	0.133	0.052
0	0.084	0.078	0.081	?

MsdS

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