ARG82784
Human Caspase 3 ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG82784-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG82784-002	Standard	2 X 10 ng/vial	4°C
ARG82784-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG82784-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG82784-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG82784-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG82784-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG82784-008	25X Wash buffer	20 ml	4°C
ARG82784-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG82784-010	STOP solution	10 ml (Ready to use)	4°C
ARG82784-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG82784 Human Caspase 3 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human Caspase 3 in serum and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	Caspase 3
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	15.6 pg/ml
Sample Type	Serum and cell culture supernatants.
Standard Range	31.2 - 2000 pg/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 6.1% Inter-Assay CV: 7.1%

Alternate Names	CPP-32; Caspase-3; EC 3.4.22.56; Apopain; CASP-3; CPP32; Cysteine protease CPP32; SCA-1; SREBP cleavage activity 1; CPP32B; Protein Yama

Application Instructions

Assay Time	~ 5 hours

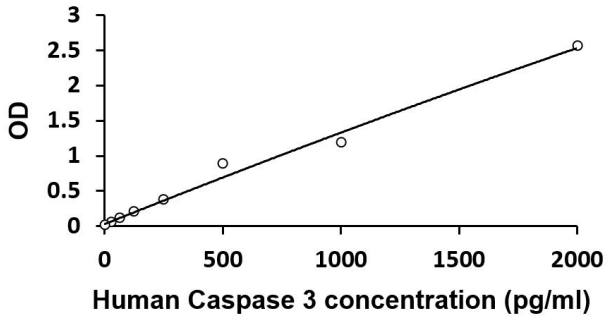
Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	CASP3
Gene Full Name	caspase 3, apoptosis-related cysteine peptidase
Background	The protein encoded by this gene is a cysteine-aspartic acid protease that plays a central role in the execution-phase of cell apoptosis. The encoded protein cleaves and inactivates poly(ADP-ribose) polymerase while it cleaves and activates sterol regulatory element binding proteins as well as caspases 6, 7, and 9. This 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. [provided by RefSeq, Aug 2017]
Function	Involved in the activation cascade of caspases responsible for apoptosis execution. At the onset of apoptosis it proteolytically cleaves poly(ADP-ribose) polymerase (PARP) at a '216-Asp-|-Gly-217' bond. Cleaves and activates sterol regulatory element binding proteins (SREBPs) between the basic helix-loop-helix leucine zipper domain and the membrane attachment domain. Cleaves and activates caspase-6, -7 and -9. Involved in the cleavage of huntingtin. Triggers cell adhesion in sympathetic neurons through RET cleavage. [UniProt]
PTM	Cleavage by granzyme B, caspase-6, caspase-8 and caspase-10 generates the two active subunits. Additional processing of the propeptides is likely due to the autocatalytic activity of the activated protease. Active heterodimers between the small subunit of caspase-7 protease and the large subunit of caspase-3 also occur and vice versa. S-nitrosylated on its catalytic site cysteine in unstimulated human cell lines and denitrosylated upon activation of the Fas apoptotic pathway, associated with an increase in intracellular caspase activity. Fas therefore activates caspase-3 not only by inducing the cleavage of the caspase zymogen to its active subunits, but also by stimulating the denitrosylation of its active site thiol. [UniProt]
Cellular Localization	Cytoplasm. [UniProt]

Images



ARG82784 Human Caspase 3 (total) ELISA Kit standard curve image

ARG82784 Human Caspase 3 (total) ELISA Kit results of a typical standard run with optical density reading at 450 nm.