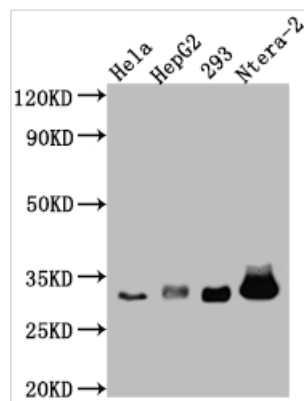




CASP3 Antibody

Product Code	CSB-RA286668A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P42574
Immunogen	A synthesized peptide derived from human pro Caspase 3
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC, IF; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200
Relevance	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.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Cell biology; Metabolism
Gene Names	CASP3
Accession NO.	5B2

Image



Western Blot

Positive WB detected in: HeLa whole cell lysate, HepG2 whole cell lysate, HEK293 whole cell lysate, Ntera-2 whole cell lysate

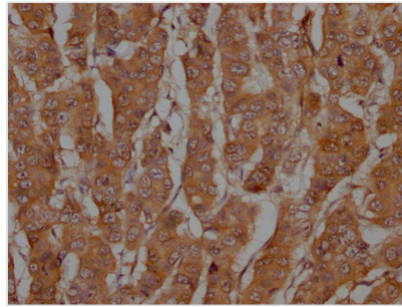
All lanes: pro Caspase 3 antibody at 1:1000

Secondary

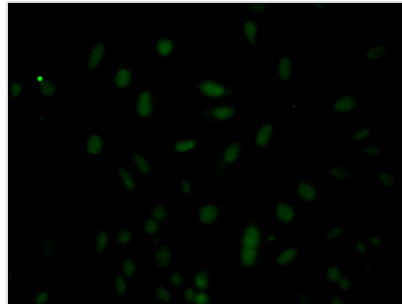
Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 32 kDa

Observed band size: 32 kDa



IHC image of CSB-RA286668A0HU diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



Immunofluorescence staining of HeLa Cells with CSB-RA286668A0HU at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

CASP3 is an endoprotease that belongs to the family of asparagine-specific cysteinyl proteases. The role of CASP3 in apoptosis is to cleave and activate caspases-6, -7, and -9 in order to break down the apoptotic cells before removal. Caspases-8 and 10 cleave and break down the CASP3 protein during this process. The order in which these proteins are cleaved and activated is critical for apoptosis execution. CASP3 expression becomes unregulated during carcinogenesis and hence may serve as a good indication of disease progression. Furthermore, via modifying apoptosis of infiltrating lymphocytes, CASP3 downregulation plays a crucial function in gastric carcinogenesis and is considered an effective marker to reveal differentiation, growth, invasion, and metastasis of gastric cancer.

The recombinant CASP3 antibody is a monoclonal antibody made in vitro using the CASP3 antibody genes that are typically expressed from a plasmid in a stable mammalian cell line. The genes coding for the CASP3 antibody will ultimately assemble into a fully functional antibody after translation. The synthesized antibody is the recombinant antibody against CASP3. It underwent purification using Affinity-chromatography. This recombinant CASP3 antibody is suitable for use in the ELISA, WB, IHC, IF to detect the CASP3 protein from Human.