Anti-Caspase-8 Antibody [SZ01-08]

ET1603-16

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IF-Tissue, IHC-P
Molecular Wt:	Predicted band size: 55 kDa
Clone number:	SZ01-08

Description: Caspase-8 is a caspase protein, encoded by the CASP8 gene. It most likely acts upon caspase-3. CASP8 orthologs have been identified in numerous mammals for which complete genome data are available. These unique orthologs are also present in birds. The CASP8 gene encodes 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 composed of a prodomain, a large protease subunit, and a small protease subunit. Activation of caspases requires proteolytic processing at conserved internal aspartic residues to generate a heterodimeric enzyme consisting of the large and small subunits. This protein is involved in the programmed cell death induced by Fas and various apoptotic stimuli. The N-terminal FADD-like death effector domain of this protein suggests that it may interact with Fas-interacting protein FADD. This protein was detected in the insoluble fraction of the affected brain region from Huntington disease patients but not in those from normal controls, which implicated the role in neurodegenerative diseases. Many alternatively spliced transcript variants encoding different isoforms have been described, although not all variants have had their full-length sequences determined.

Immunogen:	Synthetic peptide within Human Caspase-8 aa 207-256 / 479.
Positive control:	Jurkat cell lysate, HeLa cell lysate, THP-1 cell lysate, HepG2 cell lysate, 293T cell lysate, human tonsil tissue.
Subcellular location:	Cytoplasm, Nucleus.
Database links:	SwissProt: Q14790 Human
Recommended Dilutions:	
WB	1:1,000-1:5,000
IF-Tissue	1:50-1:200
IHC-P	1:50-1:200
Storage Buffer:	1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.
Storage Instruction:	Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.
Purity:	Protein A affinity purified.

Images

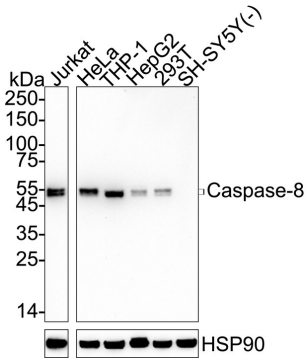

Fig1: Western blot analysis of Caspase-8 on different lysates with Rabbit anti-Caspase-8 antibody (ET1603-16) at 1/1,000 dilution.

Lane 1: Jurkat cell lysate
Lane 2: HeLa cell lysate
Lane 3: THP-1 cell lysate
Lane 4: HepG2 cell lysate
Lane 5: 293T cell lysate
Lane 6: SH-SY5Y cell lysate (negative)

Lysates/proteins at 20 µg/Lane.

Predicted band size: 55 kDa
Observed band size: 55/54 kDa

Exposure time: 2 minutes; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET1603-16) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

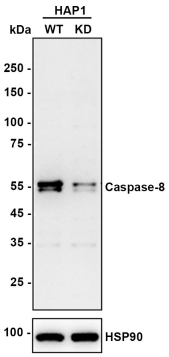

Fig2: Western blot analysis of Caspase-8 on different lysates with Rabbit anti-Caspase-8 antibody (ET1603-16) at 1/1,000 dilution.

Lane 1: HAP1-parental cell lysate
Lane 2: HAP1-Caspase-8 KD cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 55 kDa
Observed band size: 54,55 kDa

Exposure time: 120 seconds; ECL: K1802;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET1603-16) at 1/1,000 dilution was used in K1803 at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

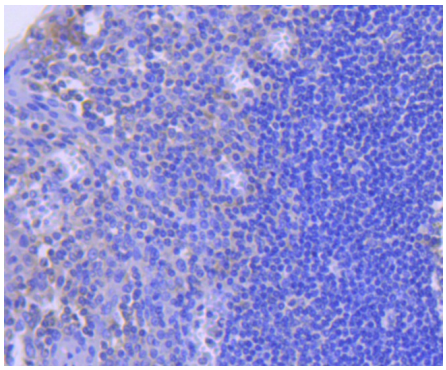

Fig3: Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-Caspase-8 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1603-16, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References

1. Mandal R et al. Caspase-8: The double-edged sword. Biochim Biophys Acta Rev Cancer. 2020 Apr
2. Jiang M et al. Caspase-8: A key protein of cross-talk signal way in "PANoptosis" in cancer. Int J Cancer. 2021 Oct