

Taspase 1 (D-20): sc-85945

BACKGROUND

Taspase 1, also known as TASP1 or C20orf13, is a 420 amino acid endopeptidase which cleaves specific substrates following aspartate residues and is required for MLL (myeloid/lymphoid or mixed-lineage leukemia) processing and, ultimately, correct expression of the HoxA gene cluster. After translation, Taspase 1 is subject to autoproteolytic processing which results in the creation of two subunits, designated α and β , which reassemble into a multimeric structure and are required for proper Taspase 1 activity. The gene encoding Taspase 1 maps to human chromosome 20. Comprising approximately 2% of the human genome, chromosome 20 contains nearly 63 million bases that encode over 600 genes, some of which are associated with Creutzfeldt-Jakob disease, amyotrophic lateral sclerosis, spinal muscular atrophy, ring chromosome 20 epilepsy syndrome and Alagille syndrome.

CHROMOSOMAL LOCATION

Genetic locus: TASP1 (human) mapping to 20p12.1; Tasp1 (mouse) mapping to 2 F3.

SOURCE

Taspase 1 (D-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of Taspase 1 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85945 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Taspase 1 (D-20) is recommended for detection of Taspase 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Taspase 1 (D-20) is also recommended for detection of Taspase 1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Taspase 1 siRNA (h): sc-76632, Taspase 1 siRNA (m): sc-154081, Taspase 1 shRNA Plasmid (h): sc-76632-SH, Taspase 1 shRNA Plasmid (m): sc-154081-SH, Taspase 1 shRNA (h) Lentiviral Particles: sc-76632-V and Taspase 1 shRNA (m) Lentiviral Particles: sc-154081-V.

Molecular Weight of Taspase 1 α fragment: 28 kDa.

Molecular Weight of Taspase 1 β fragment: 22 kDa.

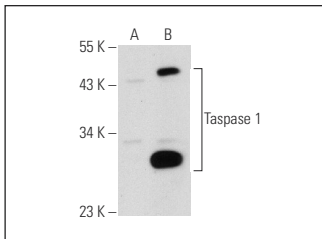
Molecular Weight of Taspase 1 precursor: 45 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, Taspase 1 (m2): 293T Lysate: sc-127633 or mouse kidney extract: sc-2255.

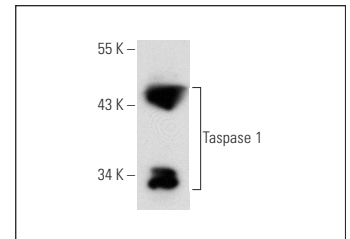
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Taspase 1 (D-20): sc-85945. Western blot analysis of Taspase 1 expression in non-transfected: sc-117752 (A) and mouse Taspase 1 transfected: sc-127633 (B) 293T whole cell lysates.



Taspase 1 (D-20): sc-85945. Western blot analysis of Taspase 1 expression in HL-60 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Knauer, S.K., et al. 2011. Bioassays to monitor Taspase1 function for the identification of pharmacogenetic inhibitors. *PLoS ONE* 6: e18253.
2. Bier, C., et al. 2012. Overexpression of the catalytically impaired Taspase1 T234V or Taspase1 D233A variants does not have a dominant negative effect in T(4;11) leukemia cells. *PLoS ONE* 7: e34142.
3. Bier, C., et al. 2012. Allosteric inhibition of Taspase1's pathobiological activity by enforced dimerization *in vivo*. *FASEB J.* 26: 3421-3429.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.


 MONOS
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Try **Taspase 1 (D-6): sc-514677** or **Taspase 1 (F-7): sc-514676**, our highly recommended monoclonal alternatives to Taspase 1 (D-20).