

## **Product datasheet for TA319496**

## **Casp2 Rabbit Polyclonal Antibody**

## **Product data:**

**Product Type:** Primary Antibodies

Applications: WB

**Recommended Dilution:** ELISA: 1:1,500 to 1:6,000, WB: 1:750

**Reactivity:** Mouse, Rat

**Host:** Rabbit

**Isotype:** IgG

Clonality: Polyclonal

**Immunogen:** A synthetic peptide corresponding to the N-terminus of rat Caspase-2 protein conjugated to

Keyhole Limpet Hemocyanin (KLH) through a cysteine residue linker.

**Formulation:** 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

**Concentration:** lot specific

**Conjugation:** Unconjugated

Storage: Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Gene Name: caspase 2

Database Link: NP 071967

Entrez Gene 12366 MouseEntrez Gene 64314 Rat

P55215

Synonyms: CASP-2; ICH-1L; ICH-1L/1S; ICH1; NEDD-2; NEDD2



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



Note:

Apoptosis occurs during normal cellular development and involves dramatic changes in cellular structure. Disruption of apoptosis may contribute to cancer and other diseases. Caspases are a family of cysteine proteases that are key mediators of programmed cell death or apoptosis. Caspase-2 has been called ICH-1 in human, CED-3 in C.elegans and NEDD-2 in mouse. Caspase-2 is synthesized as an inactive precursor that is processed in cells undergoing apoptosis. The precursor form of all caspases is composed of a pro-domain, and large and small catalytic subunits. The active forms of caspases are generated by several stimuli, including ligand-receptor interactions, growth factor deprivation and inhibitors of cellular functions. Caspase-2 is activated in vitro by caspase-1, caspase-3 and granzyme B. Caspase-2 functions as an upstream apoptosis initiator that participates in the activation of downstream caspases, such as caspase-3, caspase-6 and caspase-7. Caspase-2 is highly expressed in embryonic mouse brain but not in adult neural tissue. Alternative mRNA splicing produces a long (48 kDa) and short (35 kDa) form of caspase-2. These forms show tissue specificity and function either as inducers or suppressors of apoptosis. Mature caspase-2 is 435 amino acids in length cleaved (~50 kDa) and is cleaved upon activation into 10 and 20 kDa subunits.

## **Product images:**



Antibody to Caspase-2 was used at 1:750 to detect rat caspase-2 in transfected human 292 cell lysates by WB. Asterisk indicates a 48 kDa caspase-2 protein clearly detected in the rat caspase-2 transfected lysate. Control (lane 1) and transfected (lane 2) lysates were loaded on a 4-20% gel for SDS-PAGE. After primary antibody incubation and washing, a 1:5,000 dilution of HRP conjugated Gt-a-Rabbit IgG preceded color development using Amersham's substrate system.