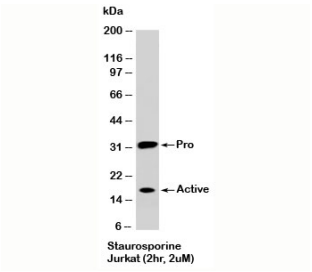
Caspase-3 Antibody, Pro and Active [clone CAS3836] (N1045)

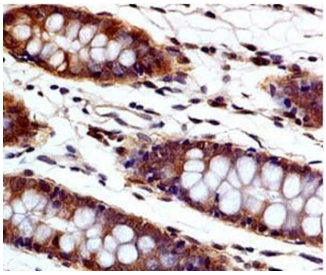
Catalog No.	Formulation	Size
N1045-100UG	0.5 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
N1045-25UG	0.5 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	25 ug

Bulk quote request

Species Reactivity	Human, Mouse, Rat
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CAS3836
Purity	Protein G purified monoclonal antibody
Buffer	1X PBS, pH 7.4
Gene ID	836
Localization	Cytoplasmic
Applications	Western Blot : 2-4ug/ml Immunohistochemistry (FFPE) : 5ug/ml
Limitations	This **Caspase-3 antibody** is available for research use only.



Western blot testing of staurosporine-treated Jurkat cells (2 hr, 2 uM) with Caspase-3 antibody at 2ug/ml. The pro form is seen at ~32kD and active caspase-3 seen at ~17 kDa and ~12 kDa.



IHC testing of FFPE human colon tissue with Caspase-3 antibody at 5ug/ml. HIER: steam tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.

Description

Caspases, or cysteine-aspartic proteases, are a family of cysteine proteases that play essential roles in inflammation, apoptosis and necrosis. They are often referred to as the 'executioners of apoptosis.' Caspases are synthesized as inactive proenzymes comprising an N-terminal peptide (prodomain) together with one large and one small subunit. Active caspase-1 and -3 are heterodimers, containing two small and two large subunits. Active Caspase-3 subunits are 17kD (p17) and 12kD (p12). Pro Caspase-3 is inactive and has virtually no activity until it is cleaved by an initiator caspase. It is activated by Caspases -8, -9 and -10 ('initiator caspases') and then effects apoptosis by cleaving targeted cellular proteins.

Application Notes

This antibody will detect the pro form and p17 and p12 active forms of Caspase-3.

Immunogen

The large subunit domain of human Caspase-3 was used as the immunogen for this monoclonal antibody.

Storage

Aliquot the Pro and Active Caspase-3 antibody and store frozen at -20oC or colder to avoid repeated freeze-thaw cycles.

Alternate Names

CASP3