For Research Use Only

## Phospho-Caspase 9 (Thr125) Monoclonal antibody, PBS Only



**Purification Method:** 

Protein A purification

CloneNo.:

1B5E11

Catalog Number: 68136-1-PBS

**Basic Information** 

Catalog Number:

68136-1-PBS BC002452

100ug, Concentration: 1 mg/ml by

Nanodrop:

Source: Mouse

Isotype:

lgG1

GenBank Accession Number:

GeneID (NCBI):

**UNIPROT ID:** 

P55211 Full Name:

caspase 9, apoptosis-related cysteine

peptidase

Calculated MW: 46 kDa Observed MW: 36 kDa

**Applications** 

**Tested Applications:** WB, Indirect ELISA

Species Specificity:

Human, rat

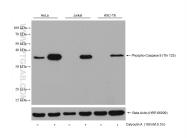
## **Background Information**

Caspase 9 also name as MCH6, APAF3, APAF-3, ICE-LAP6 and CASPASE-9c, is a member of the cysteine-aspartic acid protease (caspase) family. It's synthesized as a 46 kDa precursor protein which can be cleaved into a 35 kDa subunit and a 11 kDa subunit. Control of all caspases is tightly regulated by a series of phosphorylation events enacted by several different kinases. Caspase-9 is the most heavily phosphorylated of all caspases, with phosphorylation of at least 11 distinct residues in all three caspase-9 domains by nine kinases. It plays a central role in the mitochondrial or intrinsic apoptotic pathway that is engaged in response to many apoptotic stimuli. Once activated, caspase-9 cleaves and activates the effector caspases 3 and 7 to bring about apoptosis. It's reported that there is an increase in caspase 9 expression and activity in the hypoxic brain. Inhibition of Caspase 9 activity would render opportunity to treat neurological diseases such as stroke, neurodegenerative diseases or brain injury caused by hypoxia. (PMID: 19788417, PMID: 10529400, PMID: 9812896, PMID: 18840507, PMID: 29066624)

Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

## Selected Validation Data



Non-treated and Calyculin A treated cells were subjected to SDS PAGE followed by western blot with 68136-1-Ig (Phospho-Caspase 9 (Thr125) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Beta Actin antibody as loading control. This data was developed using the same antibody clone with 68136-1-PBS in a different storage buffer formulation.