PRODUCT DATA SHEET

Product: Anti-Caspase-7, Clone MCH3-14

Cat. No: **MC-462 (100 µg)**

Background:
Caspases are key effectors of programmed cell death. Caspase-7 along with caspase 3 and 6 form the group of effector caspases that are responsible for the cleavage of multiple substrates including the cytokeratins, PARP, alpha lodrin, NuMa and others. Caspase-7 is a 303 amino acid protein with high similarity to caspase-3. Caspase-7 is found in three variant forms. Granzyme B activates pro-caspase-7 to a form which can cleave PARP to its key fragment of about 85 kDa. Also, in vivo caspase-7 appears to be a better substrate for granzyme B than caspase-3. Pro-caspase-7 has been shown to exist as dimers or high order oligomers. Caspase-7 may be an important intracellular effector of granzyme B-medicated apoptosis and cytotoxic T-lymphocyte-induced cell killing in vivo.

Ig Isotype: IgG1

Immunogen:
Synthetic peptide corresponding to amino acids 1 to 11 of the human caspase-7 enzyme.

Format:
Mouse monoclonal antibody against human Caspase-7 (cysteine-requiring aspartate protease-7). Available in 100 ul vials at a concentration of 1 mg/ml (100ug) in PBS with 0.08% sodium azide. The antibody is 0.2 um sterile filtered.

Storage and Stability:
Store at –20˚C. Antibodies are stable for one year from purchase if stored frozen. Aliquot to avoid freeze/thaw cycles.

Applications and Suggested Dilutions:
- Western Blot

The optimal dilution for a specific application should be determined by the researcher.

References:
1. Cohen G.M., et al. (1997) Caspases: the executioners of apoptosis. Biochem. J. 326: 1-16.
2. Chandler J.M., et al. (1998) Different subcellular distribution of Caspase-3 and Caspase-7 following Fas-induced apoptosis in mouse liver. J. Bio. Chem. 273: 10815-10818.
3. Behrensdorf H.A., et al. (2000) the endothelial monocyte-activating polypeptide II (EMAP II) is a substrate for caspase-7. FEBS Lett. 466: 143-147.

Limitations:
For *in vitro* research use only. Not for use in diagnostics or in humans.

Warranty:
No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.