



## PRODUCT DATA SHEET

**Product:** Ac-VEID-CHO (Caspase-6 Inhibitor-CHO)

**Cat. No.:** AB-027 (5 mg)

**Chemical Name:**

Acetyl-Val-Glu-Ile-Asp-CHO

**Formula:**

C<sub>22</sub>H<sub>36</sub>N<sub>4</sub>O<sub>9</sub>

**Molecular Weight:**

500

**Description:**

White solid. Peptide-aldehyde inhibitor of caspases.

**Introduction:**

Caspase-6 (also known as Mch2) is a member of the caspase family of cysteine proteases involved in apoptosis. It is a member of the Group III caspases (6, 8, and 9) which prefer the (L/V)EXD sequence as a substrate. Caspase-6 prefers a hydrophobic amino acid at P4, along with caspases-1 and -4, as opposed to the preference for Asp seen with caspases-2, -3, and -7. This is at odds with the gene sequence alignment that predicts Caspase-6 is more closely related to caspases-3 and -7 than to caspase-1. The preference by Caspase-6 for  $\beta$ -branched amino acids in P4 fits well with the one known natural substrate, lamin A, and distinguishes it from caspases-1 and -4. Reconstitution experiments indicate that Caspase-6 activates caspases-3 and -7 and is therefore part of the proteolytic cascade that initiates apoptosis.

**Specificity:**

A reversible inhibitor of caspase-6. May also cause some inhibition of caspase-3. Inhibition of caspase-6 in cell extracts. Methylated peptide-FMK inhibitors (eg. Caspase-6 Inhibitor, Cat No. AB-007) are superior for use on live cells.

**Purity:**

>95%

**Solubility:**

Soluble in both DMSO and water.

**Protocol:**

It is recommended that stock solutions be prepared in high-purity DMSO (99.9%), and then diluted into aqueous medium. Stock solutions should not be stored.

**Storage and Stability:**

Store at -20°C, desiccated. Do not store stock solutions. Stable for 6 months when stored as recommended. Stock solutions should be prepared shortly prior to use.

**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.