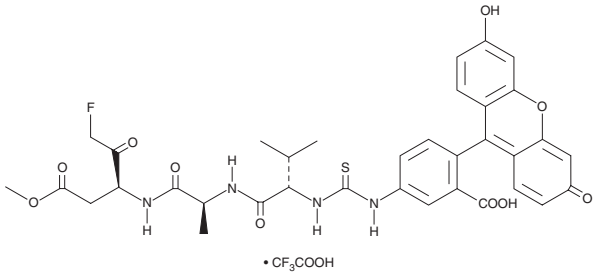
PRODUCT INFORMATION

Fluorescein-VAD-FMK (trifluoroacetate salt)

Item No. 44451

Synonyms:	FITC-VAD-FMK, FITC-Val-Ala-Asp-fluoro-methyl-ketone, Fluorescein-VAD(OMe)-FMK
MF:	$C_{35}H_{35}FN_4O_{10}S \bullet CF_3COOH$
FW:	836.8
Purity:	≥95%
Ex./Em.:	496/515 nm
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Fluorescein-VAD-FMK (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the fluorescein-VAD-FMK (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Fluorescein-VAD-FMK (trifluoroacetate salt) is soluble (≥10 mg/ml) in ethanol and DMSO.

Description

Fluorescein-VAD-FMK is a cell-permeable, fluorescein-conjugated pan-caspase probe and inhibitor.[1] The VAD-FMK moiety acts as a pseudosubstrate for activated caspases and inactivates these enzymes. Probes containing VAD-FMK linked to a fluorophore have been used to detect apoptosis *in vitro* by flow cytometry or fluorescence microscopy.[2,3] Fluorescein displays excitation/emission maxima of 496/515 nm, respectively.[4]

References

1. Czechowska, E., Ranoszek-Soliwoda, K., Tomaszewska, E., *et al*. Comparison of the antioxidant activity of catalase immobilized on gold nanoparticles via specific and non-specific adsorption. *Colloids Surf B Biointerfaces* **171**, 707-714 (2018).
2. Jayaraman, S. Intracellular determination of activated caspases (IDAC) by flow cytometry using a pancaspase inhibitor labeled with FITC. *Cytom. Part A* **56A**, 104-112 (2003).
3. Kitazawa, M., Anantharam, V., and Kanthasamy, A.G. Dieldrin induces apoptosis by promoting caspase-3-dependent proteolytic cleavage of protein kinase Cdelta in dopaminergic cells: relevance to oxidative stress and dopaminergic degeneration. *Neuroscience* **119(4)**, 945-964 (2003).
4. Schauenstein, K., Schauenstein, E., and Wick, G. Fluorescence properties of free and protein bound fluorescein dyes. I. Macrospectrofluorometric measurements. *J. Histochem. Cytochem.* **26(4)**, 277-283 (1978).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

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