

# FK-866

## Nampt inhibitor

Selective inhibitor of the nicotinamide pathway dependent NAD<sup>+</sup> synthesis, causing NAD<sup>+</sup> depletion. Highly specific, non-competitive inhibitor of nicotinamide phosphoribosyltransferase (NAMPT/NAPRT) for both the enzyme/substrate complex and the free enzyme ( $K_i=0.4$  nM and  $K_i'=0.3$  nM, respectively). NAD<sup>+</sup> depletion by FK-866 directs delayed cell death by apoptosis in Hep-G2 human liver carcinoma cells ( $IC_{50} \sim 1$  nM). Causes premature senescence in normal human smooth muscle cells. Induces autophagy in SH-SY5Y neuroblastoma cells, as indicated by the formation of LC3-positive vesicles.

NAMPT catalyzes the condensation of nicotinamide with 5-phosphoribosyl-1-pyrophosphate to yield nicotinamide mononucleotide, an intermediate in the biosynthesis of NAD<sup>+</sup>. It is the major rate limiting component in the mammalian NAD<sup>+</sup> biosynthesis pathway.

Citations: 12

[View Online »](#)

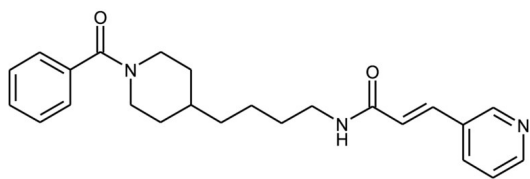
## Ordering Information

[Order Online »](#)

ALX-270-501-M001	1mg
------------------	-----

## Manuals, SDS & CofA

[View Online »](#)



## Handling & Storage

Use/Stability	As indicated on product label or CoA when stored as recommended.
Handling	Very hygroscopic Packaged under inert gas. Keep under inert gas.
Long Term Storage	-20°C
Shipping	Blue Ice

## Regulatory Status

RUO - Research Use Only

## Product Details

Alternative Name	K 22.175, N-[4-(1-benzoyl-4-piperidinyl)butyl]-3-(3-pyridinyl)-2E-propenamide
Appearance	White to yellow solid.
CAS	658084-64-1
Couple Target	Nampt
Couple Type	Inhibitor
Formula	$C_{24}H_{29}N_3O_2$
MW	391.5
Purity	≥98% (NMR)
Solubility	Soluble in 100% ethanol, dimethyl formamide (40mg/ml) or DMSO (25mg/ml); sparingly soluble in aqueous buffers.
Source	Synthetic.

Last modified: May 29, 2024



ENZO LIFE SCIENCES,  
INC.  
Phone: 800.942.0430  
[info-usa@enzolifesciences.com](mailto:info-usa@enzolifesciences.com)

European Sales Office  
ENZO LIFE SCIENCES  
(ELS) AG  
Phone: +41 61 926 8989  
[info-eu@enzolifesciences.com](mailto:info-eu@enzolifesciences.com)

Belgium, The Netherlands  
& Luxembourg  
Phone: +32 3 466 0420  
[info-be@enzolifesciences.com](mailto:info-be@enzolifesciences.com)

France  
Phone: +33 472 440 655  
[info-fr@enzolifesciences.com](mailto:info-fr@enzolifesciences.com)

Germany  
Phone: +49 7621 5500 526  
[info-de@enzolifesciences.com](mailto:info-de@enzolifesciences.com)

UK & Ireland  
Phone (UK customers):  
0845 601 1488  
Phone: +44 1392 825900  
[info-uk@enzolifesciences.com](mailto:info-uk@enzolifesciences.com)