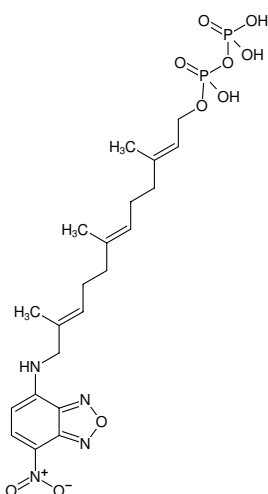


**NBD-FPP**

3,7,11-trimethyl-12-(7-nitro-benzo[1,2,5]oxadiazol-4-ylamino),
-dodeca-2,6,10-trien-1 pyrophosphate

Fluorescent lipid donor for protein geranylgeranyltransferases (RabGGTase, GGTase-I)

Cat. No.	Amount
LI-013	20 µl



Structural formula of NBD-FPP

For general laboratory use.

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C

Additional Storage Conditions: avoid freeze/thaw cycles, store dark

Shelf Life: 12 months

Molecular Formula: C₂₁H₃₀N₄O₁₀P₂

Molecular Weight: 560.43 g/mol

Purity: ≥ 90 % (HPLC)

Form: liquid (Supplied as 1 mM solution in 25 mM (NH₄)₂CO₃)

Concentration: 1 mM

Spectroscopic Properties: λ_{exc} 480 nm, λ_{em} 530 nm,
ε 11.0 L mmol⁻¹ cm⁻¹ (pH 7.5)

Description:

NBD-FPP is a fluorescent analog of farnesyl pyrophosphate (FPP). It serves as lipid donor for geranylgeranyltransferases (RabGGTase, GGTase-I). NBD-FPP changes its fluorescence upon binding to protein substrates and allows for efficient fluorescence based GGTase activity assays and inhibitor screening.

Selected References:

Nguyen *et al.* (2009) Analysis of the eukaryotic prenylome by isoprenoid affinity tagging. *Nature Chemical Biology*. **5** (4):227.

Wu *et al.* (2007) Synthesis of a fluorescent analogue of geranylgeranyl pyrophosphate and its use in a high-throughput fluorometric assay for Rab geranylgeranyltransferase. *Nat. Protoc.* **2** (11):2704.

Dursina *et al.* (2006) Identification and specificity profiling of protein prenyltransferase inhibitors using new fluorescent phosphoisoprenoids. *J. Am. Chem. Soc.* **128** (9):2822.