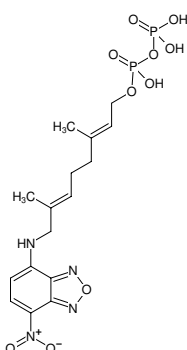


**NBD-GPP**

3,7-dimethyl-8-(7-nitro-benzo[1,2,5]oxadiazol-4-ylamino),
-octa-2,6-diene-1- pyrophosphate
Fluorescent lipid donor for protein farnesyltransferase (FTase)

| Cat. No. | Amount |
|----------|--------|
| LI-014 | 20 µl |



Structural formula of NBD-GPP

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:** C₁₆H₂₂N₄O₁₀P₂**Molecular Weight:** 492.31 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-GPP is a fluorescent analog of geranyl pyrophosphate (GPP). It serves as lipid donor for farnesyltransferase (FTase) - one of the three mammalian protein prenyltransferases. The attachment of the NBD-geranyl group to protein substrates allows for efficient fluorescence based FTase 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.