

DFDNB

21525

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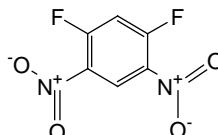
Number**Description**

21525

DFDNB (1,5-difluoro-2,4-dinitrobenzene), 50mg

Molecular Weight: 204.09

Spacer Arm: 3.0Å

**Storage:** Upon receipt store product at 4°C. Product is shipped at ambient temperature.**Product Information**

DFDNB (1,5-difluoro-2,4-dinitrobenzene) is an aryl halide compound with two reactive fluorine atoms that can couple to amine-containing molecules, yielding stable arylamine bonds. Aryl halides also can react with thiol, imidazolyl, and phenolate groups. Conjugates formed with sulfhydryl groups, however, are reversible by using an excess of a thiol-containing reagent, such as dithiothreitol. DFDNB is especially useful in cross-linking cellular membrane proteins, as it is able to penetrate the hydrophobic regions of the lipid bilayer.

Difluorobenzene reagents, such as DFDNB, have been used for cross-linking phospholipids in human erythrocyte membranes, conjugation of small peptides to a carrier protein, studying protein interactions in the myelin membrane, cross-linking cytochrome oxidase subunits, and studying conformational effects of calcium on troponin C. DFDNB is soluble in acetone and most other water-miscible organic solvents.

General References

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- Kornblatt, J.A. and Lake, D.F. (1980). Crosslinking of cytochrome oxidase subunits with difluorodinitrobenzene. *Can J Biochem* **58**:219-24.
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- Zahn, H. and Meinhoffer, J. (1958). Reactions of 1,5-difluoro-2,4-dinitrobenzene with insulin. *Makromol Chem* **26**:153.

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