

Building Block for the Synthesis of Benzobisthiazole Derivatives



4,8-Dibromobenzo[1,2-c:4,5-c']-bis[1,2,5]thiadiazole
1g / 5g
[D4086]

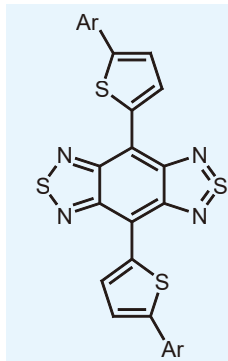
Advantages

- Strong electron accepting property
- Allows the introduction of various units by cross coupling reaction

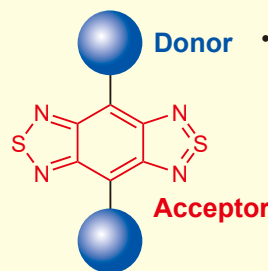
Taking advantage of the strong electron accepting property of the benzobisthiazole moiety, applications in n-type organic semiconductors and D-A-D type infrared absorption and emission dyes have been reported.

D4086

Cross Coupling



- Air-stable n-type organic semiconductors ¹⁾
- Thermoelectric materials ²⁾



- D-A-D type dyes with absorption and emission in the second near-infrared optical window ³⁾
- Absorption: 750 - 1000 nm**
- Emission: 950 - 1200 nm**

References 1) M. Mamada *et al.*, *Chem. Mater.* **2015**, *27*, 141. <https://doi.org/10.1021/cm503579m>
2) T. L. D. Tam *et al.*, *ACS Materials Lett.* **2020**, *2*, 147. <https://doi.org/10.1021/acsmaterialslett.9b00483>
3) L. Wang *et al.*, *ACS Nano* **2024**, *18*, 4683. <https://doi.org/10.1021/acsnano.3c12316>

Related Products

4,7-Dibromo-5,6-dinitro-2,1,3-benzothiadiazole
TU-1

1g / 5g [D4985]
100mg / 250mg [T3922]

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