

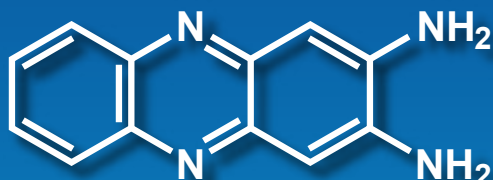
New

MATERIALS ANALYTICAL



# Fluorescent Dye for Highly Sensitive Chemosensor

## DAP



2,3-Diaminophenazine (= DAP)

1g / 5g  
[D4492]

### Advantages

- Shows strong fluorescence (550 - 580 nm).
- Changes the absorbance and fluorescence intensity by interacting with metal ion species.

### Applications

- Can be used as a fluorescent sensor to recognize specific metal ions and anion species.<sup>1,2,3</sup>
- Can be used as a building block for fluorescent dyes with phenazine skeleton.<sup>4</sup>

### References

- 1) 2,3-Diaminophenazine as a reagent in analytical chemistry  
T. Pavolini, *Industria Chimica* **1933**, 8, 692.
- 2) Highly fluorescent probe for copper (II) ion based on commercially available compounds and live cell imaging  
D. Udhayakumari, S. Velmathi, Y. Sung, S. Wu, *Sens. Actuators B Chem.* **2014**, 198, 285.  
DOI: <https://doi.org/10.1016/j.snb.2014.03.063>
- 3) Highly selective and sensitive chemosensor based on 2,3-diaminophenazine hydrochloride for the detection of cyanide in pure water and its application in plant seed samples  
B. Yong, T. Wei, W. Qu, Q. Lin, Y. Zhang, H. Yao, *New J. Chem.* **2018**, 42, 14766.  
DOI: <https://doi.org/10.1039/C8NJ02316F>
- 4) New phenazine based AIE probes for selective detection of aluminium(iii) ions in presence of other trivalent metal ions in living cells  
G. Balamurugan, S. Velmathi, N. Thirumalaivasan, S. P. Wu, *Analyst* **2017**, 142, 4721.  
DOI: <https://doi.org/10.1039/C7AN01478C>

### Related Products

1,2-Phenylenediamine	25g / 100g / 500g [P0168]
1,2-Phenylenediamine [for Biochemical Research]	1g / 5g [P1805]
2,3-Diaminonaphthalene	1g / 5g [D1045]
2,3-Diaminonaphthalene [for Biochemical Research]	100mg [D4101]
3,3'-Diaminobenzidine	5g / 25g [D0077]
3,3'-Diaminobenzidine [for Biochemical Research]	1g / 5g [D3756]

### Ordering and Customer Service

#### TCI AMERICA

Tel : 800-423-8616 / 503-283-1681  
Fax : 888-520-1075 / 503-283-1987  
E-mail : Sales-US@TCIchemicals.com

#### TCI EUROPE N.V.

Tel : +32 (0)3 735 07 00  
Fax : +32 (0)3 735 07 01  
E-mail : Sales-EU@TCIchemicals.com

#### TCI Deutschland GmbH

Tel : +49 (0)6196 64053-00  
Fax : +49 (0)6196 64053-01  
E-mail : Sales-DE@TCIchemicals.com

#### Tokyo Chemical Industry UK Ltd.

Tel : +44 (0)1865 78 45 60  
E-mail : Sales-UK@TCIchemicals.com

#### TCI Chemicals (India) Pvt. Ltd.

Tel : 1800 425 7889 / 044-2262 0909  
Fax : 044-2262 8902  
E-mail : Sales-IN@TCIchemicals.com

#### 梯希爱(上海)化成工业发展有限公司

Tel : 800-988-0390 / 021-67121386  
Fax : 021-6712-1385  
E-mail : Sales-CN@TCIchemicals.com

#### TOKYO CHEMICAL INDUSTRY CO., LTD.

Tel : +81 (0)3-5640-8878  
E-mail : globalbusiness@TCIchemicals.com

Availability, price or specification of the listed products are subject to change without prior notice. Reproduction forbidden without the prior written consent of Tokyo Chemical Industry Co., Ltd.