

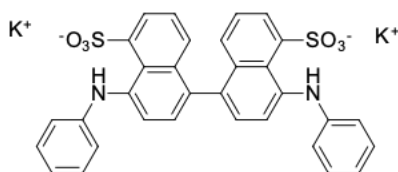
## Bis-ANS, protein conformation probe

<http://www.lumiprobe.com/p/bis-ans-65664-81-5>

Bis-ANS is a high-affinity fluorescent probe for nonpolar cavities in proteins. Its hydrophobic phenyl and naphthyl rings interact noncovalently with proteins and protein degradation products.

As with other anilinonaphthalene sulfonates (ANS), bis-ANS is essentially nonfluorescent in water but becomes noticeably fluorescent in a nonpolar environment. When free, bis-ANS has an excitation maximum at 390 nm and an emission maximum at 523 nm but undergoes a blue shift with an increase in fluorescence intensity when bound to protein.

Bis-ANS is frequently used to monitor the formation of protein aggregates and indicate protein folding and conformational changes. The dye is also used to detect A $\beta$  fibers.



**Structure of Bis-ANS**

### General properties

Appearance: light yellow-green crystals

Molecular weight: 672.87

CAS number: 65664-81-5

Molecular formula:  $C_{32}H_{22}K_2N_2O_6S_2$

IUPAC name: dipotassium;8-anilino-5-(4-anilino-5-sulfonatophthalen-1-yl)naphthalene-1-sulfonate

Solubility: DMF: 30 mg/ml, DMSO: 30 mg/ml, ethanol: slightly soluble, PBS (pH 7.2): 5 mg/ml

Quality control: NMR  $^1H$  and HPLC-MS (95+%)

Storage conditions: 24 months after receipt at  $-20^\circ C$  in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.

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