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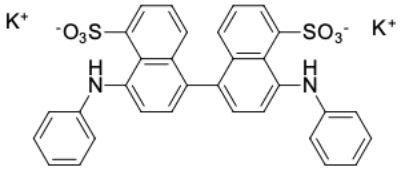
Bis-ANS, protein conformation probe

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 Aβ 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-sulfonatonaphthalen-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 ^{1}H and HPLC-MS (95+%)
Storage conditions:	24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.
Legal statement:	This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.