

ANTS

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Product attributes

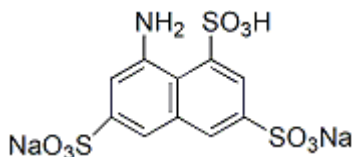
CAS number	5398-34-5
Excitation/Emission	353/520 nm

Product Description

ANTS (8-aminonaphthalene-1,3,6-trisulfonic acid, disodium salt) is a highly negatively charged dye with an amino group that can be coupled to an aldehyde or ketone group to form an unstable Schiff base. The Schiff base is usually chemically reduced by sodium borohydride (NaBH_4) or sodium cyanoborohydride ($\text{NaB}(\text{CN})\text{H}_3$) to form a stable linkage (1). This labeling technique has been widely used for the labeling and subsequent sequencing of oligosaccharides and glycoproteins. The negative charges of the dye facilitate the electrophoretic separation of the degradation products of carbohydrate polymers.

ANTS has also been used together with the fluorescent quencher DPX ([80012](#)) for the studies of membrane fusion or permeability (2). The mixture of ANTS-DPX is minimally fluorescent initially, but becomes increasingly more fluorescent upon dilution (i.e., membrane fusion or leakage).

- $\lambda_{\text{Ex}}/\lambda_{\text{Em}} = 353/520 \text{ nm}$
- $\epsilon = 65,000$
- Light yellow solid soluble in water and DMSO
- Store at 4°C and protect from light, especially in solution
- $\text{C}_{10}\text{H}_7\text{NNa}_2\text{O}_9\text{S}_3$
- MW: 427
- [5398-34-5]



References

1. Electrophoresis 12, 94 (1991).
2. Anal Biochem 222, 270 (1994)
3. Biochemistry 29, 1309 (1990).