

Product Information

ANTS (8-aminonaphthalene-1,3,6-trisulfonic acid, disodium salt)

Catalog Number: 90010

Unit Size: 500 mg

Storage and Handling

Store solid at 4°C and protect from light. Stock solutions may be prepared in water and should be stored at 4°C away from light. Product is stable for at least 12 months from date of receipt when stored as recommended.

Molecular Information: C₁₀H₇NNa₂O₃S₃

CAS number: 5398-34-5

Molecular Weight: 427

Color and Form: Off-white solid

Solubility: Soluble in water

Absorption/Emission: 353/520 nm

Extinction Coefficient: 6,200

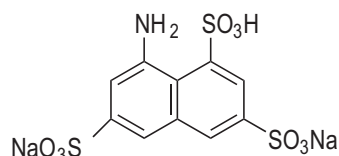


Figure 1. ANTS (8-aminoaphthalene-1,3,6-trisulfonic acid, disodium salt)

Product Description

ANTS 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. Typically, the Schiff base is chemically reduced by sodium borohydride (NaBH₄) or sodium cyanoborohydride (NaB(CN)H₃) to form a stable linkage. 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 (see related products) for the studies of membrane fusion or permeability. The mixture of ANTS-DPX is minimally fluorescent initially, but becomes increasingly more fluorescent when dilution (i.e., membrane fusion or leakage) occurs.

References

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

Related Products

| Catalog number | Product |
|----------------|---------------------|
| 80012 | DPX |
| 90028 | APTS |
| 90082 | DMSO, Anhydrous |
| 96009 | Cyanine 555 Aminoxy |
| 96008 | Cyanine 647 Aminoxy |
| 92166 | CF@488DI Hydrazide |
| 92164 | CF@555DI Hydrazide |
| 92165 | CF@647DI Hydrazide |
| 92184 | CF@660DI Hydrazide |
| 92185 | CF@680DI Hydrazide |
| 92151 | CF@350 Hydrazide |
| 92183 | CF@405S Hydrazide |
| 96063 | CF@430 Hydrazide |
| 96064 | CF@440 Hydrazide |
| 92152 | CF@488A Hydrazide |
| 92154 | CF@568 Hydrazide |
| 92158 | CF@594 Hydrazide |
| 92156 | CF@633 Hydrazide |
| 92157 | CF@640R Hydrazide |
| 92136 | CF@647 Hydrazide |
| 96024 | CF@660R Hydrazide |
| 96025 | CF@680R Hydrazide |
| 92192 | CF@770 Hydrazide |

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