

# PRODUCT INFORMATION



## Arachidonic Acid sulfonate (sodium salt)

Item No. 9001886

**Formal Name:** nonadeca-4Z,7Z,10Z,13Z-tetraene-1-sulfonate, monosodium salt

**Synonym:** AA sulfonate

**MF:**  $C_{19}H_{31}O_3S \cdot Na$

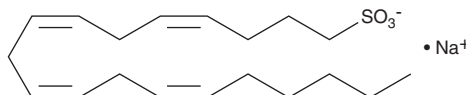
**FW:** 362.5

**Purity:**  $\geq 95\%$

**Supplied as:** A solution in methanol

**Storage:**  $-20^{\circ}C$

**Stability:**  $\geq 2$  years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Description

Arachidonic acid (Item No. 90010) is an essential fatty acid and a precursor for all prostaglandins, thromboxanes, and leukotrienes. Virtually all cellular arachidonic acid is esterified in membrane phospholipids where its presence is tightly regulated through multiple interconnected pathways.<sup>1</sup> Free arachidonic acid is a transient, critical substrate for the biosynthesis of eicosanoid second messengers. Receptor-stimulated release, metabolism, and re-uptake of free arachidonate are all important aspects of cell signaling and inflammation.<sup>2</sup> Arachidonic acid sulfonate has a sulfonate group linked to the  $\alpha$ -carbon of arachidonic acid, which creates a dissymmetric molecule with potentially improved lipophilicity.

### References

1. Nixon, A.B., Greene, D.G., and Wykle, R.L. Comparison of acceptor and donor substrates in the CoA-independent transacylase reaction in human neutrophils. *Biochim. Biophys. Acta* **1300**, 187-196 (1996).
2. Burgoyne, R.D. and Morgan, A. The control of free arachidonic acid levels. *Trends Biochem. Sci.* **15**, 365-366 (1990).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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