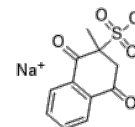


Product Name : Menadione sodium bisulfite
Cat. No. : PC-23245
CAS No. : 130-37-0
Molecular Formula : C₁₁H₉NaO₅S
Molecular Weight : 276.24
Target : PI3K
Solubility : 10 mM in DMSO



Biological Activity

Menadione sodium bisulfite (MSB) is a water-soluble form of vitamin K precursor menadione, suppresses prostate cancer growth by targeting the kinase VPS34 (phosphatidylinositol 3-kinase catalytic subunit type 3).

Menadione sodium bisulfite (MSB) directly oxidizes essential cysteines on class III PI 3-kinase VPS34, thus inactivating the PI(3)P-producing enzyme.

Menadione sodium bisulfite (MSB) suppresses PC progression and induces oxidative stress. MSB triggers an oxidative cell death modality.

Dietary MSB improved muscle histology and function and extended life span in a myotubular myopathy model.

References

Swamynathan MM, et al. Science. 2024 Oct 25;386(6720):eadk9167.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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