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Sodium orthovanadate (磷酸酯酶抑制剂)

产品编号	产品名称	包装
S1873-2g	Sodium orthovanadate (磷酸酯酶抑制剂)	2g
S1873-10g	Sodium orthovanadate (磷酸酯酶抑制剂)	10g

产品简介:

- Sodium orthovanadate, 中文名为正钒酸钠, 是一种常用的磷酸酯酶抑制剂, 可以抑制碱性磷酸酯酶(alkaline phosphatase), 酸性磷酸酯酶(acid phosphatase), 蛋白酪氨酸磷酸酯酶(tyrosine phosphatase)等磷酸酯酶。Sodium orthovanadate也可以抑制Na⁺/K⁺ ATPase等ATPase。常用于抑制蛋白去磷酸化或促进蛋白的磷酸化激活, 在提取细胞或组织蛋白时常用于保持蛋白的磷酸化状态。
- Sodium orthovanadate在酸性条件下, 例如pH3.75, 可以形成十钒酸盐(Sodium decavanadate)。Sodium decavanadate可以抑制inositol 1,4,5-trisphosphate-(IP3)诱导的钙离子释放, 并可以抑制IP3和其受体的结合。在过氧化氢存在时, orthovanadate可以转变成pervanadate (过钒酸盐)。
- Sodium orthovanadate分子量为183.91, 分子式为Na₃VO₄, CAS Number: 13721-39-6。本产品为进口分装, 纯度>99.9% (trace metals basis)。
- Sodium orthovanadate可溶于水(100mg/ml)。为确保该为单体形式, 可将溶液加热沸腾至半透明, 并调节pH至10左右, 待冷却后分装于塑料瓶中冷冻保存。如Sodium orthovanadate溶液颜色变橙黄色, 为Sodium orthovanadate转化为devanadate, 可调节pH至10并加热沸腾, 即可重新转变为无色的单体钒酸盐。

包装清单:

产品编号	产品名称	包装
S1873-2g	Sodium orthovanadate (磷酸酯酶抑制剂)	2g
S1873-10g	Sodium orthovanadate (磷酸酯酶抑制剂)	10g
—	说明书	1份

保存条件:

室温保存。配制成溶液后-20°C保存。

注意事项:

- 本产品对人体有害, 操作时请小心, 并注意有效防护以避免直接接触人体或吸入体内。
- 本产品仅限于专业人员的科学研究用, 不得用于临床诊断或治疗, 不得用于食品或药品, 不得存放于普通住宅内。
- 为了您的安全和健康, 请穿实验服并戴一次性手套操作。

使用说明:

1. Sodium orthovanadate常见使用浓度范围为0.1-2mM。具体的最佳工作浓度请参考相关文献, 或根据实验目的, 以及所培养的特定细胞和组织, 通过实验进行摸索和优化。

使用本产品的文献:

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