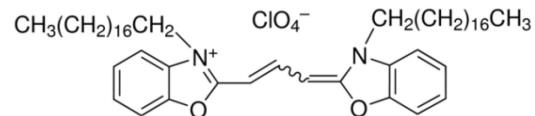
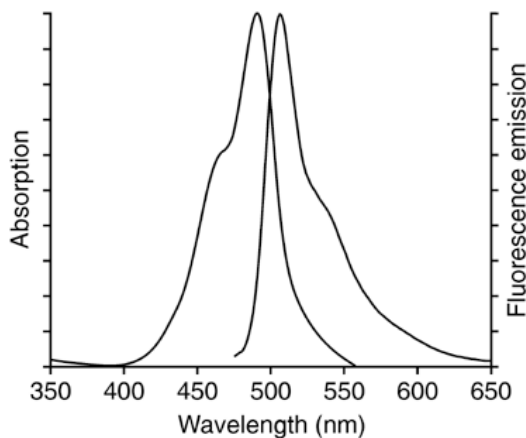


DiO (细胞膜绿色荧光探针)

产品编号	产品名称	包装
C1038	DiO (细胞膜绿色荧光探针)	10mg

产品简介:

- DiO即DiOC18(3), 全称为3,3'-dioctadecyloxacarbocyanine perchlorate, 是最常用的细胞膜荧光探针之一, 呈现绿色荧光。DiO是一种亲脂性膜染料, 进入细胞膜后可以侧向扩散逐渐使整个细胞的细胞膜被染色。
- DiO在进入细胞膜之前荧光非常弱, 仅当进入到细胞膜后才可以被激发出很强的荧光。DiO被激发后可以发出绿色的荧光, DiO和磷脂双层膜结合后的激发光谱和发射光谱参考下图。其中, 最大激发波长为484nm, 最大发射波长为501nm。



- DiO的分子式为C₅₃H₈₅ClN₂O₆, 分子量为881.72, CAS number为34215-57-1。
- DiO可以溶解于无水乙醇、DMSO和DMF, 其中在DMSO溶解度大于为10mg/ml。发现较难溶解时可以适当加热, 并用超声处理以促进溶解。
- DiO 被广泛用于正向或逆向的, 活的或固定的神经等细胞或组织的示踪剂或长期示踪剂(long-term tracer)。DiO通常不会明显影响细胞的生存力(viability)。DiO对于细胞膜染色的荧光强度通常要低于DiI, 有时对于某些经过固定的组织的染色效果欠佳。
- DiO除了最简单的细胞膜荧光标记外, 还可以用于检测细胞的融合和粘附, 检测发育或移植过程中细胞迁移, 通过FRAP(Fluorescence Recovery After Photobleaching)检测脂在细胞膜上的扩散, 检测细胞毒性和标记脂蛋白等。
- 用于细胞膜荧光标记时, DiO的常用浓度为1-30μM, 最常用的浓度为5-10μM。DiO可以直接染色活的细胞或组织, 染色时间通常为5-20分钟。对于固定的细胞或组织, 通常宜使用配制在PBS中的4%多聚甲醛进行固定, 使用其它不适当的固定液会导致荧光背景较高。

包装清单:

产品编号	产品名称	包装
C1038	DiO (细胞膜绿色荧光探针)	10mg
—	说明书	1份

保存条件:

4°C避光保存, 一年有效。配制的储存液-20°C避光保存, 半年有效。

注意事项:

- 荧光染料均存在淬灭问题, 请尽量注意避光, 以减缓荧光淬灭。
- 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。

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