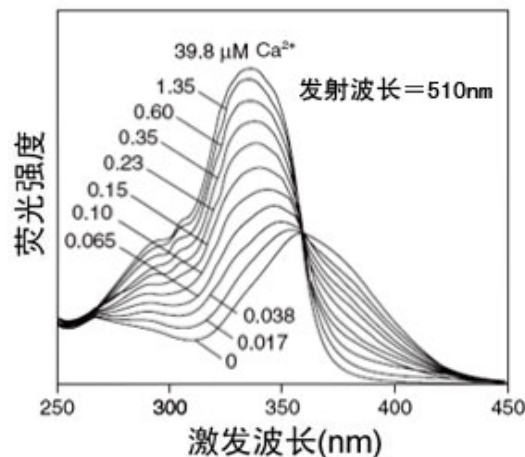


Fura-2 AM (钙离子荧光探针, 2mM)

产品编号	产品名称	包装
S1052	Fura-2 AM (钙离子荧光探针, 2mM)	50微升

产品简介:

- Fura-2 AM, 也称Fura-2 pentakis(acetoxymethyl) ester, 是最常用的检测细胞内钙离子浓度的荧光探针之一。分子式为 $C_{44}H_{47}N_3O_{24}$, 分子量为1001.9。
- 本Fura-2 AM (钙离子荧光探针) 是配制于无水DMSO (anhydrous DMSO)中的储存液, 浓度为2mM。
- Fura-2 AM是一种可以穿透细胞膜的荧光染料。Fura-2 AM的荧光比较弱, 最大激发波长为369nm, 最大发射波长为478nm, 并且其荧光不会随钙离子浓度改变而改变。Fura-2 AM进入细胞后可以被细胞内的酯酶剪切形成Fura-2, 从而被滞留在细胞内。Fura-2可以和钙离子结合, 结合钙离子后在330-350nm激发光下可以产生较强的荧光, 而在380nm激发光下则会导致荧光减弱。这样就可以使用340nm和380nm这两个荧光的比值来检测细胞内的钙离子浓度, 可以消除不同细胞样品间荧光探针装载效率的差异, 荧光探针的渗漏, 细胞厚度差异等一些误差因素。Fura-2和钙离子结合后, 最大激发波长为335nm (最大激发波长随离子浓度的不同而有所不同), 最大发射波长为505nm。实际检测时推荐使用的激发波长为340nm, 发射波长为510nm。如果做双波长检测, 则推荐使用的激发波长为340nm和380nm。Fura-2的激发光谱参考下图, 不同曲线表示不同钙离子浓度时的激发光谱。



- Fura-2相对而言有较强的抗荧光淬灭能力, 在荧光显微镜或其它荧光检测设备上可以连续检测1小时而不明显影响其荧光效果。
- 用于细胞内钙离子检测时, Fura-2 AM的常用浓度为0.5-5 μ M。通常用含有0.5-5 μ M的Fura-2 AM的适当溶液和细胞一起在4-37 $^{\circ}$ C孵育15-60分钟, 即可完成荧光探针的装载。

包装清单:

产品编号	产品名称	包装
S1052	Fura-2 AM (钙离子荧光探针, 2mM)	50微升
—	说明书	1份

保存条件:

-20 $^{\circ}$ C避光保存, 6个月有效。

注意事项:

- 本Fura-2 AM在4 $^{\circ}$ C、冰浴等较低温度情况下会凝固而粘在离心管管底、管壁或管盖内, 可以20-25 $^{\circ}$ C水浴温育片刻至全部融解后使用。
- 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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