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BCIP/NBT碱性磷酸酯酶显色试剂盒

产品编号	产品名称	包装
C3206	BCIP/NBT 碱性磷酸酯酶显色试剂盒	共100ml

产品简介:

- BCIP/NBT碱性磷酸酯酶显色试剂盒(BCIP/NBT Alkaline Phosphatase Color Development Kit)是一种用于免疫组化显色、Western等膜显色和诱导多功能干细胞iPS鉴定等的试剂盒。
- 碱性磷酸酯酶(Alkaline Phosphatase, AP/ALP/AKP/ALKP/ALPase/Alk Phos)常被称作碱性磷酸酶(EC 3.1.3.1), 是一类水解酶, 通过水解磷酸单酯将底物分子上的磷酸基团除去, 并生成磷酸根离子和自由的羟基, 其去磷酸化作用的底物包括核苷酸、蛋白质和生物碱等, 并在碱性条件下最为有效。该酶是一组同功酶的统称。常见的小牛肠碱性磷酸酶(Calf Intestinal Alkaline Phosphatase, CIAP/CIP)被广泛用于二抗等的标记最终用于蛋白和核酸等的检测, 也常用于DNA或RNA 5' 和3' 末端的去磷酸化(去单磷酸化), 特别是质粒的5'末端去磷酸化以避免质粒自连等。
- BCIP/NBT是碱性磷酸酯酶的常用底物。在碱性磷酸酯酶的催化下, BCIP会被水解产生强反应性的产物, 该产物会和NBT发生反应, 形成不溶性的深蓝色至蓝紫色的NBT-formazan。
- 本试剂盒可以用于细胞或组织的碱性磷酸酯酶显色包括诱导多功能干细胞iPS的鉴定, 也可以用于Western等结合有碱性磷酸酯酶的膜的显色检测。同时也可以用于细胞或组织内源性的碱性磷酸酯酶显色。
- 有Nature论文注明使用了本试剂盒(Nature. 2009 Sep 3;461(7260):86-90)。

包装清单:

产品编号	产品名称	包装
C3206-1	碱性磷酸酯酶显色缓冲液	100ml
C3206-2	BCIP溶液(300X)	350μl
C3206-3	NBT溶液(150X)	700μl
—	说明书	1份

保存条件:

4°C保存, 一年有效。BCIP溶液和NBT溶液需避光保存。

注意事项:

- BCIP对人体有刺激性, 操作时请小心, 并注意适当防护以避免直接接触人体或吸入体内。NBT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. 对于组织切片或细胞样品或膜, 在与碱性磷酸酯酶标记的抗体或其它形式的探针孵育后, 用适当洗涤液洗涤3-5次, 每次3-5分钟。对于检测内源性碱性磷酸酯酶的组织或细胞样品, 在适当固定后, 也用适当洗涤液洗涤3-5次, 每次3-5分钟。
2. 按照如下比例依次加入各溶液, 混匀后即配制成BCIP/NBT染色工作液:

碱性磷酸酯酶显色缓冲液	3ml	10ml
BCIP溶液(300X)	10μl	33μl
NBT溶液(150X)	20μl	66μl
BCIP/NBT染色工作液	3.03ml	10.1ml

3. 最后一次洗涤完毕后, 去除洗涤液, 加入适量BCIP/NBT染色工作液, 确保能充分覆盖样品。
4. 室温避光孵育5-30分钟或更长时间(可长达24小时), 直至显色至预期深浅。
5. 去除BCIP/NBT染色工作液, 用蒸馏水洗涤1-2次即可终止显色反应。
6. 对于组织切片或细胞样品, 显色反应终止后, 如有必要可以用中性红染色液(neutral red staining solution)染色, 以便于观察。对于膜, 显色反应终止后, 可以室温晾干避光保存。

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