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4%多聚甲醛固定液

| 产品编号 | 产品名称 | 包装 |
|-------------|-----------|---------|
| P0099-100ml | 4%多聚甲醛固定液 | 100ml |
| P0099-500ml | 4%多聚甲醛固定液 | 500ml |
| P0099-3L | 4%多聚甲醛固定液 | 500ml×6 |

产品简介:

- 4%多聚甲醛固定液(4% Paraformaldehyde Fix Solution, 4% PFA Fix Solution)是一种广泛用于免疫组化(Immunohistochemistry, IHC)、免疫荧光(Immunofluorescence, IF)、免疫细胞化学(Immunocytochemistry, IC)、流式分析(Fluorescence-activated cell sorting, FACS)等检测时组织、组织切片、细胞等生物样品固定的溶液。本产品配制在PBS溶液中,可直接用于组织或细胞的固定,无需稀释。若需使用低浓度多聚甲醛,可使用PBS按比例稀释。
- 组织学上,4%的多聚甲醛穿透力强,固定均匀,能使组织硬化,有利于切片。该固定剂造成的组织收缩少,损伤小,较为温和,能很好的保存固有物质,保持组织的抗原性和细微结构。此外,多聚甲醛可用于固定并保存脂肪及脂类物质。
- 本产品固定效果好、应用广,适用于各种常见细胞或组织的固定,对皮肤、肌肉、内脏等均有良好的固定效果,但主要作用于蛋白质,无法固定尿酸和糖类。
- 固定液可使细胞或组织的蛋白质凝固,终止内源性或外源性酶反应,防止组织自溶或异溶,以保持原有结构和形态。对免疫组化而言更有原位保存抗原的作用,避免抗原失活或弥散。固定液种类很多,常见的有多聚甲醛、甲醛、戊二醛、乙醇、丙酮等。其固定原理不同,各有优缺点。目前在科学研究中多聚甲醛应用最广,通过形成分子间的交联从而使细胞或组织的三维结构得以被固定。多聚甲醛是甲醛的聚合物,性质比甲醛稳定,且对抗原的破坏能力弱于甲醛,因此,科学研究中常用多聚甲醛作为固定剂。
- 本产品经反复测试,可以很好的适用于IHC、IF、IC和FACS等相关检测时样品的固定。
- 按照每个样品固定时需要1毫升固定液计算,一个包装的本产品可以固定100个、500个或3000个样品。

包装清单:

| 产品编号 | 产品名称 | 包装 |
|-------------|-----------|---------|
| P0099-100ml | 4%多聚甲醛固定液 | 100ml |
| P0099-500ml | 4%多聚甲醛固定液 | 500ml |
| P0099-3L | 4%多聚甲醛固定液 | 500ml×6 |
| — | 说明书 | 1份 |

保存条件:

-20℃保存,一年有效。4℃保存,一个月有效。

注意事项:

- 本产品放置过久其中的醛基可能会被氧化为酸,使溶液pH降低,从而影响染色。
- 不同细胞或组织样品所需的固定时间有所不同,应当根据细胞或组织的种类以及组织块的大小来调整固定时间。
- 多聚甲醛虽然作用温和,但能硬化组织,固定时间过久会导致组织变脆,切片时易碎。因此固定时间通常不宜超过24小时。
- 多聚甲醛可长期存在于固定过的细胞或组织样品中,固定完成后用适当的洗涤液或水冲洗数小时仍会有残留,因此后续实验结果如果受醛基影响,须尽量洗去残留的多聚甲醛。
- 醛基与抗原蛋白的氨基交联形成羧甲基,使抗原决定簇的三维构象出现空间障碍。分子间交联形成的网格结构可能部分或完全掩盖某些抗原决定簇,使之不能充分暴露,可造成假阴性的染色,影响免疫组化结果。因此,4%多聚甲醛固定的细胞或组织样品在进行免疫组化检测时,有时需要对抗原先进行修复,然后才能进行免疫染色等后续操作。
- 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. 对于细胞样品,去除培养液后,按照每六孔板一个孔加入1毫升固定液的比例,加入4%多聚甲醛固定液。对于细胞涂片等其它细胞样品,加入固定液的量以充分盖住样品为准。通常室温固定10-20分钟即可,但固定较长时间,例如1-2小时也是可以的。后续需使用适当的洗涤液充分洗涤以去除残留的多聚甲醛。
2. 对组织切片,加入4%多聚甲醛固定液量以充分覆盖切片为准,或使用染色架进行固定。通常室温固定10-20分钟即可完成固定,

但切片较厚时可以估计较长时间，例如1-2小时。后续需使用适当的洗涤液充分洗涤以去除残留的多聚甲醛。

- 对于组织块样品，浸泡入4%多聚甲醛固定液中，室温或4°C浸泡固定2到24小时。建议不超过8小时，除非组织块特别大，难以渗透。固定完成后，放入装有蒸馏水的离心管中清洗，每15-30分钟换一次水，共6-8次，建议在摇床进行，或用流水冲洗1-2小时。随后梯度脱水，进行包埋。如果暂时不包埋可放入70-75%的酒精中保存。
- 详细的免疫染色操作可以参考我们的相关网页：<http://www.beyotime.com/support/immunol-staining.htm>。

相关产品：

| 产品编号 | 产品名称 | 包装 |
|-------------|-----------------------|---------|
| P0081 | 柠檬酸钠抗原修复液(50X) | 100ml |
| P0083 | 改进型柠檬酸钠抗原修复液(50X) | 100ml |
| P0085 | EDTA抗原修复液(50X) | 100ml |
| P0086 | 柠檬酸钠-EDTA抗原修复液(40X) | 125ml |
| P0088 | 通用型强力抗原修复液(10X) | 100ml |
| P0090 | 冰冻切片快速抗原修复液(5X) | 100ml |
| P0092 | 漂片抗原修复液(10X) | 100ml |
| P0095-100ml | 免疫染色通透液(Saponin) | 100ml |
| P0095-500ml | 免疫染色通透液(Saponin) | 500ml |
| P0096-100ml | 免疫染色通透液(Triton X-100) | 100ml |
| P0096-500ml | 免疫染色通透液(Triton X-100) | 500ml |
| P0097-100ml | 免疫染色强力通透液 | 100ml |
| P0097-500ml | 免疫染色强力通透液 | 500ml |
| P0098-100ml | 免疫染色固定液 | 100ml |
| P0098-500ml | 免疫染色固定液 | 500ml |
| P0099-100ml | 4%多聚甲醛固定液 | 100ml |
| P0099-500ml | 4%多聚甲醛固定液 | 500ml |
| P0099-3L | 4%多聚甲醛固定液 | 500ml×6 |
| P0102 | 免疫染色封闭液 | 100ml |
| P0260 | QuickBlock™免疫染色封闭液 | 100ml |

使用本产品的文献：

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