



碧云天生物技术/Beyotime Biotechnology

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## 红细胞裂解液

产品编号	产品名称	包装
C3702-120ml	红细胞裂解液	120ml
C3702-500ml	红细胞裂解液	500ml

### 产品简介：

- 碧云天生产的红细胞裂解液(Red Blood Cell Lysis Buffer)，也称ACK Lysis Buffer，是一种用于从人或鼠等的血液或组织样品中裂解并去除无细胞核红细胞的溶液。
- 本裂解液经过优化配方，在裂解红细胞的同时几乎不损伤淋巴细胞(lymphocyte)或其它有细胞核的细胞。
- 本裂解液的主要有效成分为氯化铵。
- 本裂解液不适用于有细胞核红细胞的裂解，例如鸟或禽类的红细胞。
- 本裂解液经过无菌处理，处理过的血液或组织细胞样品可以用于后续的原代培养、细胞融合以及核酸或蛋白的提取及各种常规的分析和检测。

### 包装清单：

产品编号	产品名称	包装
C3702-120ml	红细胞裂解液	120ml
C3702-500ml	红细胞裂解液	500ml
—	说明书	1份

### 保存条件：

4°C保存，一年有效。室温保存，3个月有效。

### 注意事项：

- 本裂解液为无菌产品，请注意保持无菌，使用本产品时宜在超净工作台内进行。
- 如果经过红细胞裂解液处理后的样品后续用于总RNA的提取，在处理细胞时不必使用经过DEPC处理过的溶液。
- 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：

#### 对于组织细胞样品：

1. 新鲜组织经过胶原酶或胰酶等消化处理，通过适当方法分散成细胞悬液，离心弃上清。
2. 加入3-5倍细胞体积的红细胞裂解液，轻轻吹打混匀，裂解1-2分钟。例如细胞沉淀的体积为1ml，则加入3-5ml的红细胞裂解液。本步骤在室温或4度操作均可。
3. 400-500g离心5分钟，弃红色上清。4°C离心效果更佳。
4. 如果发现红细胞裂解不完全，可以重复上述步骤2和步骤3一次。通常极微量的红细胞不会影响后续的一些检测。
5. 洗涤1-2次：加入适量PBS、HBSS、生理盐水或无血清培养液，重悬沉淀，400-500g离心2-3分钟，弃上清。可再重复1次，共洗涤1-2次。洗涤液的用量通常应至少为细胞沉淀体积的5倍。4°C离心效果更佳。
6. 根据实验需要用适当溶液重悬细胞沉淀后即可进行计数等后续实验。

#### 对于组织细胞样品无需洗涤的快速操作步骤：

1. 新鲜组织经过胶原酶或胰酶等消化处理，通过适当方法分散成细胞悬液，离心弃上清。
2. 对于0.2ml细胞沉淀加入1ml红细胞裂解液，轻轻吹打混匀，裂解1-2分钟。本步骤在室温或4°C操作均可。
3. 加入15-20ml PBS、HBSS、生理盐水或无血清培养液，混匀。
4. 400-500g离心5分钟，弃红色上清。4°C离心效果更佳。
5. 如果发现红细胞裂解不完全，可以重复上述步骤2和步骤3一次。通常极微量的红细胞不会影响后续的一些检测。
6. 根据实验需要用适当溶液重悬细胞沉淀后即可进行计数等后续实验。

**说明：**对于常规步骤，多一步洗涤过程中的离心，但可以节省洗涤液的用量，并且洗涤效果也更好一些，同时不需要大体积的离心管。快速步骤少了一次离心，但洗涤效果略差一些，同时需要大体积的离心管。

#### 对于血液样品：

1. 取新鲜抗凝血，400-500g离心5分钟，离心弃上清。
2. 加入6-10倍细胞体积的红细胞裂解液，轻轻吹打混匀，裂解1-2分钟。例如细胞沉淀的体积为1ml，则加入6-10ml的红细胞裂

解液。本步骤在室温或4度操作均可。注意：对于鼠的血液，裂解1-2分钟已经足够，对于人的外周血，宜延长裂解时间至4-5分钟，并且裂解过程中宜适当偶尔摇动以促进红细胞裂解。

3. 400-500g离心5分钟，弃红色上清。4°C离心效果更佳。
4. 如果发现红细胞裂解不完全，可以重复上述步骤2和步骤3一次。通常极微量的红细胞不会影响后续的一些检测。
5. 洗涤1-2次：加入适量PBS、HBSS、生理盐水或无血清培养液，重悬沉淀，400-500g离心2-3分钟，弃上清。可再重复1次，共洗涤1-2次。洗涤液的用量通常应至少为细胞沉淀体积的5倍。4°C离心效果更佳。
6. 根据实验需要用适当溶液重悬细胞沉淀后即可进行计数等后续实验。

**注意：**对于微量或少量的血液样品，可以在第一步中不进行离心弃上清的操作，直接在第二步中加入10倍血液体积的红细胞裂解液，并在室温或4°C裂解4-5分钟。对于鼠的血液，裂解4-5分钟已经足够，对于人的外周血，宜延长裂解时间至10分钟，但通常不宜超过15分钟，并且裂解过程中宜适当偶尔摇动以促进红细胞裂解。后续步骤相同。

#### 对于血液样品无需洗涤的快速操作步骤：

1. 每1ml新鲜抗凝血中加入10ml红细胞裂解液，轻轻吹打混匀，裂解4-5分钟。本步骤在室温或4度操作均可。注意：对于鼠的血液，裂解4-5分钟已经足够，对于人的外周血，宜延长裂解时间至10分钟，但通常不宜超过15分钟，并且裂解过程中宜适当偶尔摇动以促进红细胞裂解。
2. 加入20-30ml PBS、HBSS、生理盐水或无血清培养液，混匀。
3. 400-500g离心5分钟，弃红色上清。4°C离心效果更佳。
4. 如果发现红细胞裂解不完全，可以重复上述步骤2和步骤3一次。通常极微量的红细胞不会影响后续的一些检测。
5. 根据实验需要用适当溶液重悬细胞沉淀后即可进行计数等后续实验。

**说明：**对于常规步骤，多一步洗涤过程的离心，但可以节省洗涤液的用量，并且洗涤效果也更好一些，同时不需要大体积的离心管。快速步骤少了一次离心，但洗涤效果略差一些，同时需要大体积的离心管。

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