

白细胞稀释液(计数液)

V02

货号: G3600

规格: 100mL

保存: 室温保存, 有效期 6 个月。

产品介绍:

白细胞(White Blood Cell, WBC), 是血液中的一种常见免疫细胞。白细胞稀释液(WBC dilution)作用原理是血液经白细胞稀释液, 成熟红细胞全部被溶解, 充入计数池后显微镜下计数一定体积内白细胞数, 换算求出每升血液中白细胞的数量。该白细胞稀释液仅用于科研领域, 不用于临床诊断。

自备材料:

新鲜全血、微量吸管、细胞计数板、显微镜

操作步骤: (仅供参考)

1. 取小号试管, 加白细胞稀释液0.38mL。
2. 用洁净干燥微量吸管取末梢血20 μ L, 擦去管外余血后加至白细胞稀释液底部, 轻轻将血放出, 再轻吸上层清液清洗吸管2~3次, 立即混匀。
3. 待红细胞完全破坏, 液体变为棕褐色后, 再次混匀后充池, 注意防止产生气泡或外溢, 室温静置2~3min, 待白细胞沉淀。
4. 置于显微镜低倍镜下依次计数四角4个大方格内的白细胞数。压线细胞按“数上不数下, 数左不数右”的原则进行计数。

计算: 白细胞数/L=(N \div 4) \times 10 \times 20 \times 10⁶=(N \div 20) \times 10⁹

N	4个大方格内白细胞总数
\div 4	每个大方格(0.1 μ L)内白细胞平均数
\times 10	1个大方格容积为0.1 μ L, 换算成1.0 μ L
\times 20	血液稀释倍数
\times 10 ⁶	由1 μ L换算成1L

注意事项:

1. 采血时不能过于挤压, 针刺深度应适当。
2. 小试管、计数板均应清洁, 以免误认细胞。
3. 在参考范围内, 大方格间的细胞数不应相差8个以上, 两次重复计数相差不应超过10%。
4. 白细胞数量过多时, 可加大稀释倍数; 白细胞数量过少时, 可计数8个大方格的白细胞数或大量取血。
5. 为了您的安全和健康, 请穿实验服并戴一次性手套操作。





White Blood Cell Dilution

Cat: G3600

Size: 100mL

Storage: RT, valid for 6 months.

Introduction

White blood cell (WBC) is a common immune cell in blood. The working principle of White Blood Cell Diluent is that the blood is diluted by the White Blood Cell Diluent, all the mature red blood cells are dissolved, and after being filled into the counting chamber, count the number of white blood cells in a certain volume under the microscope, and calculate the number of white blood cells in each liter by conversion. The White Blood Cell Diluent is only used in scientific research and not in clinical diagnosis.

Self Provided Materials

Fresh whole blood, Micropipette, Cell counting plate, Microscope

Protocol(for reference only)

1. Take small test tube and add 0.38mL White Blood Cell Diluent.
2. Take 20 μ L of peripheral blood with a clean and dry micropipette, wipe off the remaining blood outside the micropipette, add it to the bottom of White Blood Cell Diluent, gently drain the blood, then gently suck the upper supernatant to clean the pipette for 2-3 times, and mix it immediately.
3. After the red blood cells are completely destroyed and the liquid turns brown, mix it again and then fill the counting chamber. Pay attention to prevent bubbles or overflows. Leave it at room temperature for 2-3 min and wait for the white blood cells to settle.
4. Count the number of white blood cell in four square grids in turn under low power microscope. Pressure line cells are counted according to the principle of "counting up and not counting down, counting left and not counting right".

Calculation: The number of white blood cell/L= $(N\div 4)\times 10\times 20\times 10^6=(N\div 20)\times 10^9$

N	Total number of white blood cell in four square grids
$\div 4$	Average number of white blood cell in each square grid (0.1 μ L)
$\times 10$	The volume of a square grid is 0.1 μ L, which is converted into 1.0 μ L.
$\times 20$	Blood dilution times
$\times 10^6$	Convert 1 μ l to 1L

Note

1. Avoid squeezing too much when collecting blood, and the acupuncture depth should be appropriate.
2. The small test tube and counting plate should be clean to avoid misidentification of cells.
3. Within the reference range, the number of cells between squares should not differ by more than 8, and the difference between two repeated counts should not exceed 10%.
4. When the number of white blood cell is too large, can increase the dilution ratio; when the number of white blood cell is too small, count the number of white blood cell in 8 large squares or a take large number of blood
5. For your safety and health, please wear experimental clothes and disposable gloves.

