

## Turk 细胞计数液

货号: G2950

规格: 100mL

保存: 室温, 避光保存, 有效期 6 个月。

### 产品介绍:

Turk 细胞计数液亦称 Tuerk 溶液, 主要由乙酸、结晶紫等组成, 用于白细胞计数。其作用原理是在稀释有核细胞的同时将影响观察的所有成熟红细胞全部裂解, 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。

Turk 细胞计数液仅用于科研领域, 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 Turk 细胞计数液 0.38mL。
- 2、用洁净干燥微量吸管取新鲜或抗凝血样 20 $\mu$ L, 擦去管外余血后加至 Turk 细胞计数液底部将血放出, 再轻吸上层清液清洗吸管 2~3 次, 立即混匀。稀释比例为 1:20, 如有核细胞较少也可以按照 1:10 稀释。
- 3、室温静置 3~5min, 再次混匀后取 10 $\mu$ L 冲入计数池, 注意防止产生气泡或外溢, 静置 2-5min 待白细胞沉淀后计数。
- 4、置于显微镜低倍镜下依次计数四角和 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 $\times$ 10<sup>6</sup>= N  $\times$  50 $\times$ 10<sup>6</sup>

N	4 个大方格内白细胞总数
$\div$ 4	每个大方格(0.1 $\mu$ L)内白细胞平均数
$\times$ 10	1 个大方格容积为 0.1 $\mu$ L, 换算成 1.0 $\mu$ L
$\times$ 20	血液稀释倍数
$\times$ 10 <sup>6</sup>	由 1 $\mu$ 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、为了您的安全和健康, 请穿实验服并戴一次性手套操作。

## Turk's Solution

**Cat:** G2950

**Size:** 100mL

**Storage:** RT, avoid light, valid for 6 months.

### Introduction

Turk's Solution, also known as Tuerk's solution, is mainly composed of acetic acid, crystal violet, etc., which is used for leukocyte count. The principle is that Turk's solution as a blood diluent, Mature red blood cells are all dissolved. Fill them into the counting chamber, count the number of leukocytes in a certain volume under the microscope, and calculate the number of leukocytes in each liter by conversion.

Turk's Solution is only used in scientific research, not in clinical diagnosis.

### Self Provided Materials

Fresh whole blood, Micropipette, Cell counting plate, Microscope

### Protocol(for reference only)

1. Take a small EP tube and add 0.38mL Turk's Solution.
2. Take 20 fresh or anticoagulant blood samples with a micro pipette  $\mu$  l. Wipe off the remaining blood outside the tube, add it to the bottom of Turk solution, discharge the blood, gently suck the supernatant, clean the straw for 2 ~ 3 times, and mix it immediately. The dilution ratio is 1:20. If there are few nucleated cells, it can also be diluted according to 1:10.
3. Let it stand at room temperature for 3 ~ 5min. After mixing again, take 10ul and flush it into the counting cell. Pay attention to prevent bubbles or overflow. Let it stand for 2-5min and count after leukocyte precipitation.
4. Count the number of leukocytes in four corners and four squares 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".

**Calculate:** leukocyte number /L= $(N\div 4)\times 10\times 20\times 10^6= N\times 50\times 10^6$

N	Total number of leukocytes in 4 squares
$\div 4$	Average number of leukocytes in each large square (0.1 $\mu$ L)
$\times 10$	The volume of a square lattice is 0.1 $\mu$ L, which is converted into 1.0 $\mu$ L
$\times 20$	Blood dilution times
$\times 10^6$	Conversion from 1 $\mu$ L to 1 L

### Note

1. When taking blood, avoid squeezing too much and keep in appropriate cupuncture depth.
2. The small test tube and counting plate shall 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. For your safety and health, please wear experimental clothes and disposable gloves.