

钙盐染色试剂盒(Von Kossa 法)

货号: G3282

规格: 2×50mL

保存: 2-8°C, 避光保存, 有效期 1 年。

产品组成:

名称	规格	保存
试剂(A): Von Kossa 银溶液	50mL	2-8°C 避光
试剂(B): 海波溶液	50mL	室温
试剂(C): Von Kossa 对照液	10mL	2-8°C

产品介绍:

钙在人体内大量存在, 构成骨骼作为支持人体的支架, 在分泌、运送、肌肉收缩、神经传导等方面也起重要作用。许多染料可以与钙形成螯合物, 包括茜素红 S、红紫素、核固红等。茜素红 S 属一种蒽醌类衍生物, 是茜素磺酸钠盐, 它能与碳酸钙或磷酸钙中的钙盐螯合形成橙红色复合物。钙盐染色常用方法有 Von Kossa 溶液和茜素红 S 法, 本产品原理在于该法是一种金属置换法, Von Kossa 银溶液作用于含有不溶性钙盐的切片时, 钙被银所置换, 银盐在光的作用下被还原为黑色金属银, 适用于大量样本的钙盐组织染色。

操作步骤: (仅供参考)

1. 组织固定于 10%中性福尔马林, 常规脱水包埋。
2. 切片厚度 5 μ m, 常规脱蜡至水。
3. 切片滴加 Von Kossa 银溶液强光照射 15-60min。蒸馏水洗 1min。
4. (可选) 滴加海波溶液处理 2min, 蒸馏水洗 2min。
5. (可选) HE 染色液或 Van Gieson 复染。
6. 常规脱水透明, 中性树脂封固。

阴性对照(可选):

取另外一张连续切片脱蜡至水, 置于 Von Kossa 对照液处理 20min, 流水冲洗 5min. 与实验片一同入 Von Kossa 银溶液, 其余步骤同上。

染色结果:

钙盐	红褐色至深黑色
细胞核	根据复染液不同而不同
背景	根据复染液不同而不同

注意事项:

1. 钙盐组织固定以中性福尔马林为佳。
2. 作用时间取决于阳光照射时光的强度和ación。
3. 若暴露于紫外灯下, 则应缩短照射时间, 一般 5-10min 即可。
4. 海波溶液处理步骤作用为去除非特异着色, Von Kossa 银溶液染色后镜下观察无明显非特异着色可选择不用海波溶液处理。
5. 为了您的安全和健康, 请穿实验服并戴一次性手套操作。





Calcium Stain Kit (Von Kossa Method)

Cat: G3282

Size: 2×50mL

Storage: 2-8°C, avoid light, valid for 1 year.

Kit Components

Reagent	2×50mL	Storage
Reagent(A): Von Kossa Silver Solution	50mL	2-8°C, avoid light
Reagent(B): Hypo Solution	50mL	RT
Reagent(C): Von Kossa Control Solution	10mL	2-8°C

Introduction

Calcium is abundant in human body, which form bones as a scaffold to support human body. Calcium plays an important role in secretion, transportation, muscle contraction, nerve conduction and so on. Many dyes can form chelates with calcium, including Alizarin Red S, Purpurin, Nuclear Fast Red, etc. Alizarin Red S is an anthraquinone derivative, which is sodium alizarin sulfonate. It can chelate with calcium carbonate or calcium phosphate in calcium carbonate to form orange red complex. The common methods of calcium salt dyeing are Von Kossa method and Alizarin Red S method. The principle of this kit is that this method is a metal replacement method. When Von Kossa Silver Solution acts on the sections containing insoluble calcium salt, the calcium is replaced by silver, and the silver salt is reduced to black metal silver under the action of light. It is suitable for calcium salt tissue dyeing of a large number of samples.

Protocol(for reference only)

1. Fix the tissue with 10%NBF and conventionally dehydrate and embed.
2. Cut the section into 5μm, conventionally dewax and hydrate.
3. Dye the section with Von Kossa Silver Solution under a strong light for 15-60min. Rinse with distilled water for 1 min.
4. (Optional)Add the Hypo Solution dropwise for 2 min. Rinse with distilled water for 2 min.
5. (Optional)Re-dyeing with HE solution or Van Gieson Solution.
6. Conventionally dehydrate, transparent and seal with resinene.

Negative Control(optional)

Take another adjacent section and dewax it to water. Put it into Von Kossa Control Solution for 20min, and rinse it with running water for 5min. Then put it into Von Kossa Silver Solution together with the experimental section, and the other steps are the same as above.

Result

Calcium Salt	Brownish Red to Dark Black
Nucleus	Range with re-dyeing solution
Background	Range with re-dyeing solution

Note

1. The fixation of tissues containing calcium salt is best to use NBF.
2. The action time depends on the intensity and time of light.
3. If exposed to UV light, the exposing time should be shortened, generally for 5-10min.
4. The function of the treatment step of the Hypo Solution is to remove non-specific staining. If there is no obvious non-specific staining observed under the microscope after staining with Von Kossa silver solution, the Hypo Solution treatment can be chosen not to be used.
5. For your safety and health, please wear experimental clothes and disposable gloves.

