

小鼠抗體快速分型鑑定套組 產品說明書

Mouse Antibody Isotyping Kit Product Insert & Protocol

科研使用資訊 / For Research Use Only (RUO)

繁體中文說明手冊	English User Protocol
【基本資訊】 • 產品目錄號：BSMABIR02 • 包裝規格：10 Tests • 儲存條件：2°C – 30°C 陰涼乾燥 • 保存效期：18 個月	【Product Specifications】 • Cat. No.: BSMABIR02 • Pack Size: 10 Tests • Storage: 2°C – 30°C (Dry & Cool) • Validity: 18 Months
一、產品簡介 本套組利用側向流動免疫層析技術（膠體金法），用於定性鑑定小鼠單株抗體的內源性重鏈型別。套組包含兩片獨立測試卡，可同時檢測小鼠： • 重鏈亞型：IgG1, IgG2a, IgG2b, IgG3, IgM • 質控線 (C)：確保測試卡運作正常。	I. Introduction The Mouse Antibody Isotyping Kit utilizes lateral flow immunochromatography technology (colloidal gold method) for the rapid, qualitative determination of mouse monoclonal antibody isotypes. The kit consists of two separate test cassettes that can simultaneously identify: • Heavy Chain Isotypes: IgG1, IgG2a, IgG2b, IgG3, and IgM. • Control Line (C): Confirms the proper fluid flow and assay validity.
二、套組組件 1. 測試卡 A：檢測 C, M, G3 條帶。 2. 測試卡 B：檢測 C, G2b, G2a, G1 條帶。 3. 樣品稀釋液：1 瓶。 4. 產品說明書：1 份。	II. Kit Components 1. Test Cassette A: Detects C, M, and G3 bands. 2. Test Cassette B: Detects C, G2b, G2a, and G1 bands. 3. Sample Dilution Buffer: 1 Bottle. 4. Product Insert: 1 Copy.
三、樣品準備與稀釋建議 為獲得最佳顯色，建議將樣品使用稀釋液稀釋至抗體濃度約 1 – 10 µg/mL： • 雜交瘤細胞培養上清：建議 1 至 1:10 稀釋。	III. Sample Preparation & Dilution Guidelines Samples should be diluted with the provided Buffer to a final antibody concentration of 1 – 10 µg/mL: • Hybridoma Supernatant: Dilute 1 to 1:10. • Mouse Ascites Fluid: Dilute 1:1,000 to 1:10,000.

- 小鼠腹水：建議 1:1,000 至 1:10,000 稀釋。
 - 純化後的單株抗體：稀釋至約 1 – 5 µg/mL 最佳。
- *(註：濃度過高可能因鉤狀效應導致質控線或測試線變淡或不顯色。)*

- Purified Monoclonal Antibody: Dilute to 1 – 5 µg/mL.
- *(Note: Excessive concentration may cause a 'Hook Effect,' leading to faint or absent lines.)*

四、操作步驟

1. 平衡至室溫：實驗前將未開封測試卡及稀釋液置於室溫 (20°C-30°C) 15–30 分鐘。
2. 拆封：撕開鋁箔袋取出測試卡 A 與 B，平放於乾淨水平檯面。
3. 滴加樣品：吸取 80 – 100 µL 已稀釋樣品，垂直且緩慢滴入卡 A 與 B 的圓形加樣孔中。
4. 計時等待：室溫下靜置，液體將靠毛細管作用向前層析。
5. 讀取結果：於 5 – 10 分鐘內觀察並記錄顯色條帶。超過 15 分鐘後判定無效。

IV. Assay Procedure

1. Equilibrate: Bring sealed pouch and buffer to room temperature (20°C - 30°C) for 15–30 minutes before testing.
2. Unseal: Open aluminum foil pouch and remove Test Cassettes A and B. Place them horizontally on a flat surface.
3. Load Sample: Pipette 80 – 100 µL of diluted sample vertically and slowly into the Sample Well of both Cassettes A and B.
4. Incubate: Leave undisturbed at room temperature for capillary migration.
5. Read Results: Read and record results within 5 – 10 minutes. Results after 15 minutes are invalid.

五、結果判讀

- 有效檢測 (Valid)：測試卡 A 與 B 頂部的質控線 (C Line) 必須均出現清晰的紅色條帶。
- 單一亞型陽性：在 C 線正常的狀況下，觀察哪一個特定亞型字母的位置出現紅色條帶。例如：卡 B 的 G1 線顯色，即為 IgG1 型。
- 多重型別陽性 (混合型)：若同時出現兩個或以上的型別條帶 (如 G1 與 M)，表示細胞株尚未單克隆化或受到污染，建議重新克隆化。
- 無效檢測 (Invalid)：若 C 線未顯色，代表測試無效，須重新檢測。

V. Result Interpretation

- Valid Test: The Control Line (C) at the top of both Cassette A and Cassette B must show a distinct red band.
- Positive Result: If the C-line is normal, observe which specific isotype letter exhibits a red band. E.g., if G1 line on Cassette B appears, the isotype is IgG1.
- Multiple Bands (Mixed): If more than one isotype band appears simultaneously (e.g., both G1 and M), it indicates the hybridoma cell line may not be monoclonal yet or contaminated. Subcloning is recommended.
- Invalid Test: If no red band appears at the Control Line (C) on either cassette, the test has failed. Re-test with a new kit.

六、注意事項

1. 本產品僅供科研使用 (Research Use Only)，不可用於臨床診斷。
2. 測試卡拆封後易吸濕，請於 10 分鐘內儘速使用。
3. 請勿混用不同批號的測試卡與稀釋液。

VI. Precautions

1. For Research Use Only (RUO). Not for use in diagnostic procedures.
2. Test cassettes are moisture-sensitive. Use within 10 minutes after unsealing.
3. Do not mix or substitute components from different lot numbers.