

# **CD44 Antibody**

#### **Datasheet**

## For Research Use Only

| Description             | Catalog No. | Size   |  |
|-------------------------|-------------|--------|--|
| CD44 Concentrate        | FP-A007-01  | 0.1 ml |  |
| <b>CD44 Concentrate</b> | FP-A007-10  | 1 ml   |  |
| CD44 Predilute          | FP-A007-70  | 7ml    |  |

## **Description**

Cluster of differentiation 44 (CD44) is a glycoprotein receptor for hyaluronic acid, which plays a fundamental role in cellular adhesion, stromal binding, migration, and cell-cell interactions. Studies have suggested that the CD44-hyaluronate interaction is central to tumor invasiveness. Positive staining with Anti-CD44 is implicated in a multitude of different cancer types, including breast, prostatic, renal cell, colonic, hepatocellular, and genitourinary carcinomas, as well as Non-Hodgkin's Lymphoma, metastatic melanoma, gastric cancer, and some soft tissue tumors. It has also been demonstrated that there is a positive correlation between tumor progression and increased expression of CD44v, a high molecular weight CD44 isoform that has been described in epithelial cells. Given the expression of CD44 in a wide range of cancers, the most practical application of CD44 immunostaining is its use in discriminating between urothelial transitional cell carcinoma in situ from non-neoplastic changes in the urothelium.

## **Specifications**

| Clone        | IHC044  |
|--------------|---|
| Source       | Mouse Monoclonal  |
| Applications | IHC (P)   |
| Formulation  | Tris Buffer, pH 7.3 - 7.7, with 1% BSA and <0.1% Sodium Azide |

#### **IHC Procedure\***

| <b>Positive Control Tissue</b>  | Benign Urothelium  |  |
|---------------------------------|--|--|
| Dilution Range                  | 1:50 – 1:200   |  |
| Pretreatment                    | Perform heat-induced epitope retrieval (HIER) at pH for 10 to 30 minutes |  |
| <b>Incubation Time and Temp</b> | 10 to 30 minutes at room temperature                                     |  |
| Detection                       | Refer to the corresponding user manual for detection system              |  |

#### Result

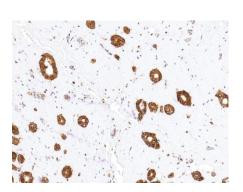


Figure. CD44 on Breast Cancer

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### **Storage and Handling**

Must store the reagent at 2-8 °C. Do not freeze. Do not use the reagent after expiration date on vial. To ensure proper stability and delivery of the antibody after each run, replace the cap and immediately place the bottle in a refrigerator in an upright position. Positive and negative controls should be simultaneously run with unknown specimens, as there are no conclusive characteristics to suggest instability of the antibody.

#### **Precautions**

The product is for research use only. Do not use for diagnosis purpose. Ensure proper handling procedures are used with all reagents. Always wear laboratory coats, disposable gloves, and other appropriate laboratory equipment when handling reagents. Do not ingest reagents, and avoid contact with eyes and mucous membranes. Wash eyes with copious amounts of water if contact occurs.

#### References

- 1. Li F, et al. "Beyond tumorigenesis: cancer stem cells in metastasis." Cell Res. 2007; 17:3-14.
- 2. **Ponta H**, et al. "CD44: from adhesion molecules to signalling regulators." Nat Rev Mol Cell Biol. 2003; 4:33-45.

## **Technical Support**

Contact FemtoPath Technical Support at +886232338585 or email to femtopath@hongjing.com.tw for assistance with more questions regarding this product.

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