

Eff. Date: 4 March 2020

Version: 2.0

IFU: Mammaglobulin ILM2804

# Mammaglobin clone 304-1A5

### **Instructions for Use**

#### Specification:

Mammaglobin is a breast-associated glycoprotein distantly related to secretoglobin family that includes human uteroglobin and lipophilin. Unlike other secretoglobin family members, mammaglobin mRNA expression is breast specific, which has been shown to be a very sensitive marker of occult breast cancer cells in sentinel lymph nodes and peripheral blood. By paraffin immunohistochemistry, the overall sensitivity of mammaglobin for breast cancers was reported about 80%. When combined with other breast-restricted markers such as GCDFP-15, an overall sensitivity of 84% could be achieved. Mammaglobin can play a contributing role in the identification of primary sites of carcinomas presenting at metastatic sites. Positive control: normal human breast tissue.

In normal breast tissue, 304-1A5 labels breast ductal and lobular epithelial cells. In tumor cells, it is reactive with all types of breast adenocarcinoma regardless tumor differentiation and types. Adenocarcinomas from other organs rarely express mammaglobin.

## Availability:

Catalog No.ContentsVolumeILM2804-C01Mammaglobin0,1 ml concentrateILM2804-C05Mammaglobin0,5 ml concentrateILM2804-C1Mammaglobin1,0 ml concentrate

Intended use: For Research Use Only

Reactivity: Human, monkey, mouse, and rabbit mammaglobin (10 kD)

**Clone:** 304-1A5

Species of origin: Mouse

Isotype: IgG1

Control Tissue: Normal or neoplastic breast tissue

Staining: Cytoplasmic

Presentation: Purified antibody with 0.2% BSA and 15mM sodium azide

# Application and suggested dilutions:

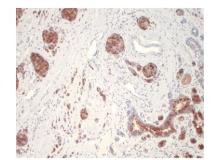
Pre-treatment: Heat induced epitope retrieval in 10 mM citrate buffer, pH6.0, or in 50 mM Tris buffer pH9.5, for 20 minutes is required for IHC staining on formalin-fixed, paraffin embedded tissue sections.

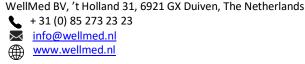
 Immunohistochemical staining of formalin-fixed, paraffin embedded tissue section (dilution up to 1:50)

The optimal dilution for a specific application should be determined by the investigator.

**Note:** Dilution of the antibody in 10% normal goat serum followed by a goat anti-mouse secondary antibody-based detection is recommended.

**Storage & Stability:** Store at 2-8 °C. Do not use after expiration date printed on the vial.







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#### References:

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- 4) Mark A. Watson, Suzanne Dintzis, et al., Mammaglobin expression in primary, metastatic, and occult cancer. Cancer Research. 1999 July; 59:3028-3031.
- 5) Fleming TP, Watson MA. Mammaglobin, a breast-specific gene, and its utility as a marker for breast cancer. Ann N Y Acad Sci. 2000; 923:78-89.
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- 7) Bhargava R, Beriwal S, et al., Mammaglobin vs GCDFP-15: an immunohistologic validation survey for sensitivity and specificity. Am J Clin Pathol. 2007 Jan; 127(1):103-13
- 8) Sasak E, Tsunoda N, et al., Breast-specific expression of MGB1/ mammaglobin: an examination of 480 tumors from various organs and clinicopathological analysis of MGB1-positive breast cancers. Mod Pathol. 2007 Feb; 20 (2):208-14.
- 9) Wang Z, Spaulding B, et al., Mammaglobin, a valuable diagnostic marker for metastatic breast carcinoma. Int J Clin Exp Pathol. 2009; 2(4):384-9.