

Breast Focus

Zeta is very excited and proud to share IVD antibodies researched and developed for Anatomic Pathology market for Immunohistochemistry. Zeta is incorporating cutting edge new technology to develop many of our Monospecific primary antibodies that are Target-Validated and Characterized for IHC on FFPE tissue sections.

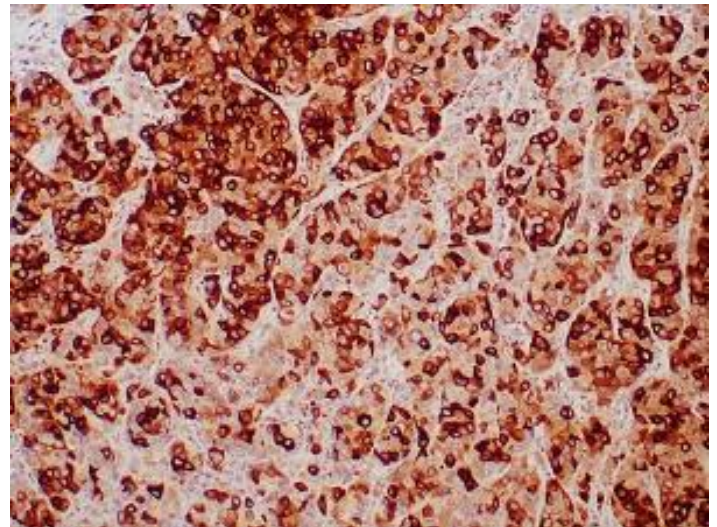
Zeta provides over 350 IVD antibodies for cancer targeted therapy and immunotherapy due to gene mutations, chromosomal translocations or gene amplifications.

Mammaglobin cocktail Antibody

Anti-mouse: Clones 304-1A5 + 31-A5, Cat # Z2011

IVD

Mammaglobin is a breast-associated glycoprotein distantly related to secretoglobulin family that includes human uteroglobin and lipophilin. Unlike other secretoglobulin 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.



Human breast carcinoma stained with anti-Mammaglobin antibody cocktail

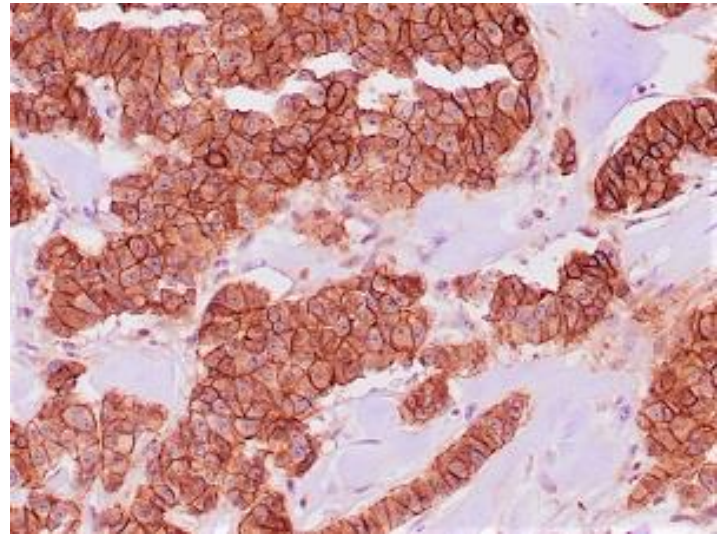
*Reference:

1. Fleming TP, et al. Ann N Y Acad Sci. 2000; 923:78-89.
2. Bhargava R, et al. Am J Clin Pathol. 2007; 127:103-13.
3. Wang Z, et al. Int J Clin Exp Pathol. 2009; 2:384-9

E-cadherin Mouse Monoclonal Antibody **Anti-mouse: Clone ZM63, Cat # Z2373**

IVD

Recognizes a protein of 120-80kDa, identified as E-cadherin. Cadherins comprise a family of Ca²⁺-dependent adhesion molecules that function to mediate cell-cell binding critical to the maintenance of tissue structure and morphogenesis. The classical cadherins, E-, N- and P-cadherin, consist of large extracellular domains characterized by a series of five homologous NH₂ terminal repeats. The relatively short intracellular domains interact with a variety of cytoplasmic proteins, such as β -catenin, to regulate cadherin function. E-cadherin plays an important role in epithelial cell adhesion. A decreased expression of E-cadherin is associated with metastatic potential and poor prognosis in breast cancer, prostate and esophageal cancer. In combination with p120 Catenin, it is useful for the differentiation between ductal (E-cadherin +) and lobular (E-cadherin -) breast carcinomas. It may also help in diagnosis of mesothelioma.



Human infiltrating breast carcinoma stained with anti-E-cadherin antibody

***Reference:**

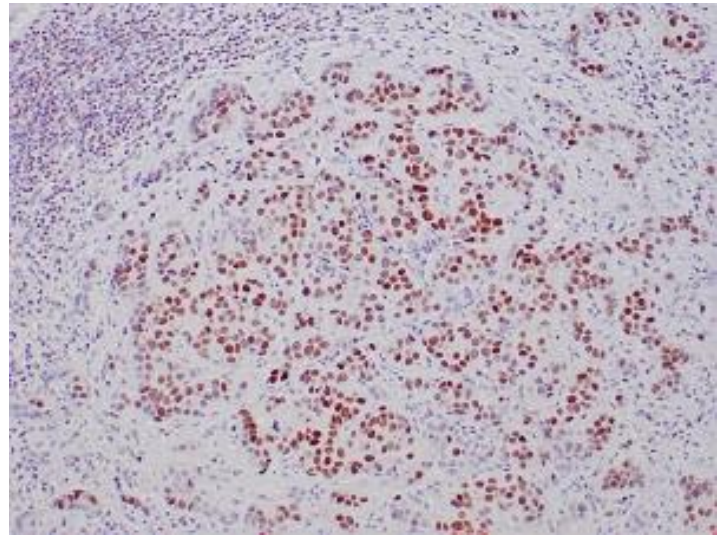
1. Karayiannakis AG, et al. Hepatogastroenterology.1998; 45:2437-42.
2. Abutaily AS, et al. J Clin Pathol. 2002; 55:662-8.
3. Dabbs DJ, et al. Am J Surg Pathol. 2007; 31:427

GATA-3 Mouse monoclonal Antibody

Anti-mouse: Clone: L50-823, Cat # Z2227

IVD

GATA-3 (GATA binding protein 3) is a member of the GATA family of transcription factors. This 50kDa nuclear protein regulates the development and subsequent maintenance of a variety of human tissues, including hematopoietic cells, skin, kidney, mammary gland, and the central nervous system. Among several other roles, GATA-3 is involved in luminal cell differentiation in the mammary gland and appears to control a set of genes involved in the differentiation and proliferation of breast cancer. The expression of GATA-3 is associated with the expression of estrogen receptor-alpha (ER) in breast cancer. GATA-3 has been shown to be a novel marker for bladder cancer. The study demonstrated that GATA-3 stained 67% of urothelial carcinomas, but none of prostate or renal carcinomas.



Human urothelial carcinoma in situ stained with anti-GATA3 antibody

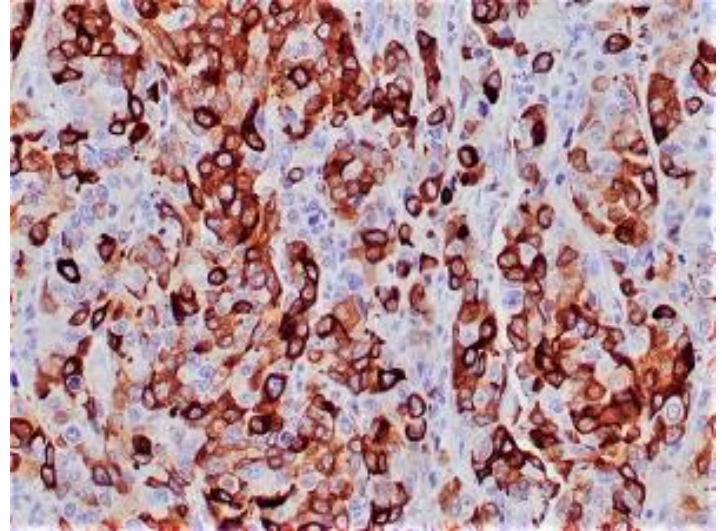
***Reference:**

1. Higgins JP, et al. Am J Surg Pathol. 2007; 31:673-680.
2. Liu H, et al. Am J Clin Pathol. 2012; 138:57-64.
3. Joulin V, et al. EMBO J. 1991; 10: 1809-16.

Mammaglobin Mouse Monoclonal Antibody **Anti-mouse: Clone ZM193, Cat # Z2506**

IVD

Mammaglobin is a 93-amino acid glycoprotein with homology to other secretoglobin-uteroglobin family members. It was originally identified as a breast cancer restricted biomarker by differential screening. Mammaglobin related to secretoglobin family includes human uteroglobin and lipophilin. Mammaglobin antibody stains cytoplasm of normal breast epithelial cells as well as primary and metastatic breast carcinomas. Mammaglobin expression is absent in prostate, kidney, colon, rectum, small intestine, stomach, pancreas, lung, and thyroid tissues. Mammaglobin may be used as part of an immunohistochemical panel for determination of metastatic breast carcinoma and tumor of unknown primary origin.



Human breast carcinoma stained with anti-Mammaglobin antibody

***Reference:**

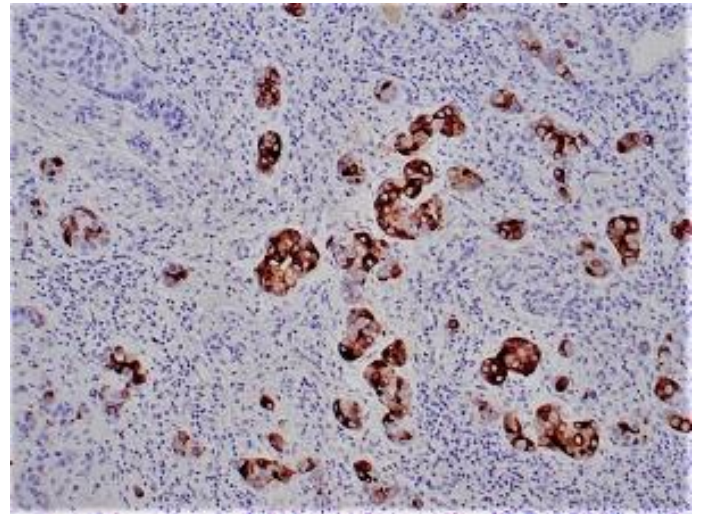
1. Fleming TP, et al. Ann N Y Acad Sci. 2000; 923:78-89.
2. Bhargava R, et al. Am J Clin Pathol. 2007; 127:103-13.
3. Wang Z, et al. Int J Clin Exp Pathol. 2009; 2:384-9.

GCDFP-15 Mouse Monoclonal Antibody

Anti-mouse: Clone: MS110, Cat # Z2237

IVD

It recognizes a protein of 15kDa, identified as Gross cystic disease fluid protein 15 (GCDFP-15). It is a major protein component of benign breast gross cysts. It is a known marker of breast cancer, as it is found in approximately 50% of all breast cancer specimens. GCDFP-15, also known as PIP, for prolactin inducible protein, is a prolactin and androgen-controlled protein. This antibody is useful in the identification of metastatic breast carcinoma, or fluid analysis.



Human breast tissue stained with anti-GCDFP-15 antibody

***Reference:**

1. Wich MR, et al. Hum Pathol. 1989; 20:281-7.
2. Tomos C, et al. Am J Surg Pathol. 2005; 29:1482-9.
3. Takeda Y, et al. Arch Pathol Lab Med. 2008; 132:239-43.

Related Products:

BCA-225 (Cu-18)	Mouse Monoclonal Antibody	Z2141	IVD
BRCA-1	Mouse Monoclonal Antibody	Z2506	IVD
Estrogen Receptor (ER) (ZR2)	Rabbit Monoclonal Antibody	Z2021	ASR
Progesterone Receptor (PR) (ZR4)	Rabbit Monoclonal Antibody	Z2023	ASR
Her2-neu (ZR5)	Rabbit Monoclonal Antibody	Z2025	ASR

All of our antibodies work on formalin-fixed paraffin embedded (FFPE) tissue sections. As an ISO 13485:2016 certified biomedical company, all our antibody clones are scientifically selected to fit the need of clinical immunohistochemical laboratories. Our primary antibodies are manufactured by FDA certified GMP facilities in the USA and purified by affinity chromatography with >99% purity.