ZETA Corporation

TARGET-VALIDATED AND CHARACTERIZED IVD ANTIBODIES
FOR PATHOLOGY AND IMMUNOTHERAPY

Product Focus

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

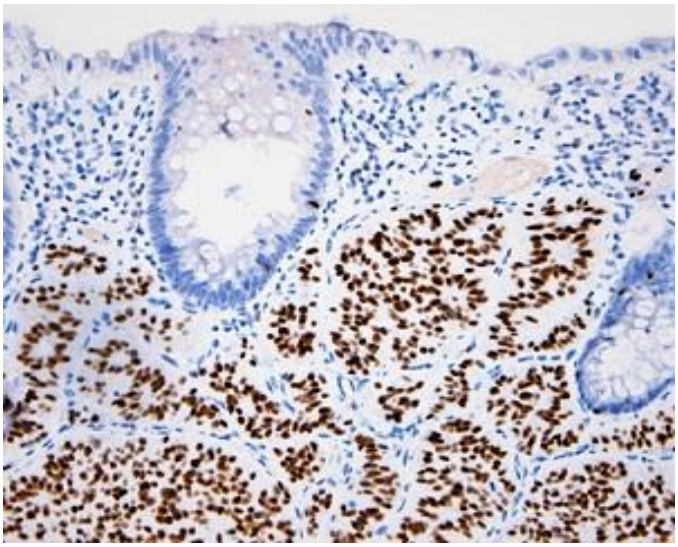
Zeta provides over 300 IVD antibodies for cancer targeted therapy and immunotherapy due to gene mutations, chromosomal translocations or gene amplifications.

INSM1 Mouse Monoclonal Antibodies

IVD

Anti-mouse: clone A8, Cat # Z2330

Insulinoma-associated 1 (INSM1) gene is intronless and encodes a protein containing both a zinc finger DNA-binding domain and a putative prohormone domain. This gene is a sensitive marker for neuroendocrine differentiation of human lung tumors.



neuroendocrine tumor stained with INSM1

- It is expressed in embryonic tissues undergoing neuroendocrine differentiation.
- It is not expressed in normal adult tissues but is highly expressed in neuroendocrine tumors.
- INSM1 acts as a transcriptional repressor of the Neuro D promoter and recruit cyclin D1 as a corepressor.
- It is required for normal differentiation of pancreatic endocrine cells.
- INSM1 is a sensitive marker for neuroendocrine differentiation of human lung tumors (95% small cell carcinoma, 91% large cell carcinoma, 100% carcinoid tumors).
- INSM1 is a more sensitive and specific neuroendocrine marker in comparison with CD56, chromogranin and synaptophysin.

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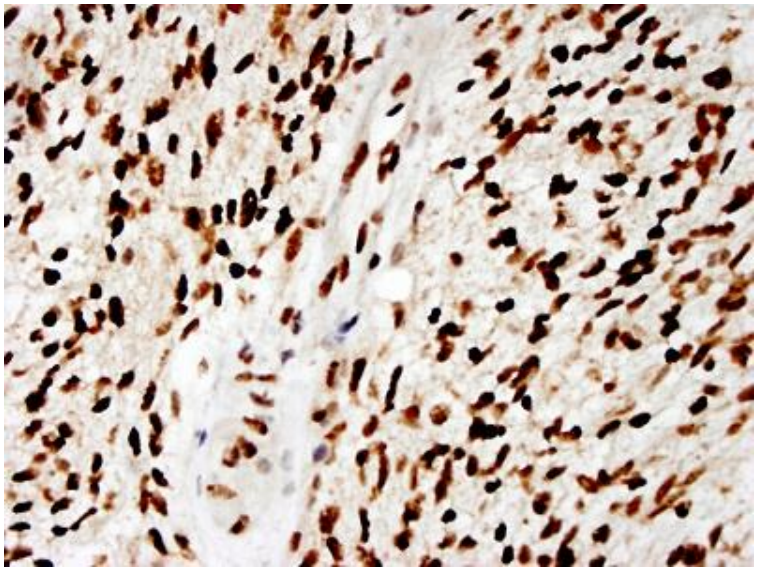
ATRX (Poly) Rabbit Polyclonal Antibody

IVD

Anti-rabbit: Cat # Z2283

Transcriptional regulator ATRX contains an ATPase/helicase domain, and thus it belongs to the SWI/SNF family of chromatin remodeling proteins. ATRX is required for deposition of the histone variant H3.3 at the telomerase and other genomic repeats. These interactions are important for maintaining silencing at these sites. In addition, ATRX undergoes cell cycle-dependent phosphorylation, which regulates its nuclear matrix and chromatin association, and suggests its involvement in the gene regulation at interphase and chromosomal segregation in mitosis.

Inherited mutations of the ATRX gene are associated with an X-linked mental retardation syndrome most often accompanied by alpha-thalassemia (ATR-X) syndrome. Acquired mutations in ATRX have been reported in a number of human cancers including pancreatic neuroendocrine tumors, gliomas, astrocytomas, osteosarcomas, and malignant pheochromocytomas.



High grade glioma stained with ATRX

- Defects in alpha thalassemia/mental retardation syndrome X-linked (ATRX), a gene that encodes a protein involved in chromatin remodeling, ATRX mutation is a marker of astrocytic lineage among the IDH1-mutant gliomas and is mutually exclusive with 1p/19q codeletion.
- ATRX mutations are most frequently in grade II (67%) and grade III (73%) astrocytomas and secondary glioblastoma multiforme (GBM) (75%).
- They are uncommon in primary GBMs and oligodendrogliomas.
- Nearly all diffuse gliomas with IDH and ATRX mutations also harbor TP53 mutation and are associated with the alternative lengthening of telomeres (ALT) phenotype.
- ATRX mutation also occurs in many other types of human tumors, such as neuroendocrine tumors.
- Immunohistochemistry for ATRX demonstrates a loss of protein expression in neoplastic cells that harbor inactivating mutations, whereas expression is retained in nonneoplastic cells within the sample, such as endothelial cells.