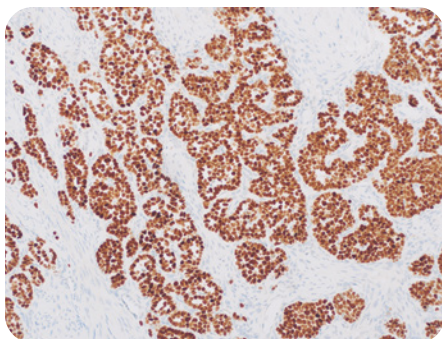
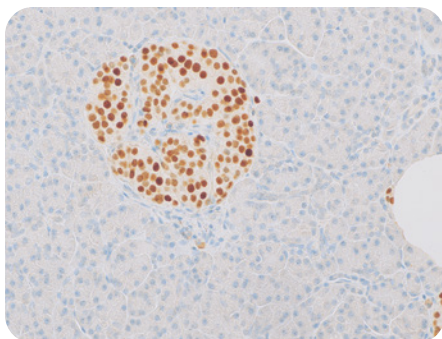
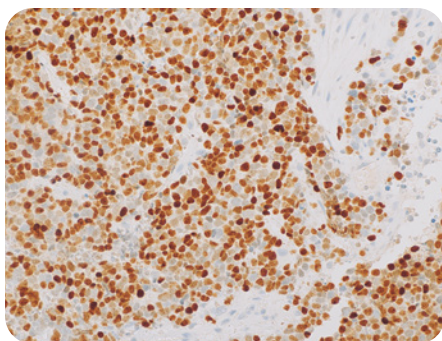


Cell Marque™ Tissue Diagnostics

INSM1 (MRQ-70)



Neuroendocrine neoplasms are specialized heterogeneous tumors that can arise in almost any part of the body. They are indolent, slow growing cancers such as colorectal carcinoid tumors, or they can be aggressive, highly metastatic tumors such as small cell lung carcinomas.¹ Because of the various sites of origin for neuroendocrine neoplasms as well as the unpredictable behavior of these cancers, there is a need for a sensitive, specific, and easy to interpret immunohistochemical marker to detect these relatively rare neoplasms. The current family of neuroendocrine markers utilized in determining the neuroendocrine nature of these tumors are all cytoplasmic targets of varied specificity and sensitivity that include NSE, synaptophysin, chromogranin A, and CD56.

Insulinoma-associated protein-1 (INSM1) is a nuclear transcription factor that is expressed in a broad range of neuroendocrine tumors. Small cell carcinoma, large cell neuroendocrine carcinoma, well differentiated neuroendocrine tumor/carcinoid tumor of various sites, paraganglioma/pheochromocytoma, Merkel cell carcinoma, olfactory neuroblastoma and medullary thyroid carcinomas all are expressed by INSM1.²

Benefits of INSM1:

- For *in vitro* diagnostic use
- Rabbit monoclonal technology
- Compatible with multiple automated platforms
- Nuclear visualization
- Better sensitivity and specificity than chromogranin A, synaptophysin, and CD56 for neuroendocrine differentiation varied by site³

Images (top to bottom)

1. neuroendocrine carcinoma
2. pancreas
3. carcinoid

Ordering Information

Description	Cat. No.
0.1 mL concentrate	475R-94
0.5 mL concentrate	475R-95
1.0 mL concentrate	475R-96
1.0 mL predilute	475R-97
7.0 mL predilute	475R-98

References

1. <https://www.mayoclinic.org/diseases-conditions/neuroendocrine-tumors/symptoms-causes/syc-20354132>
2. Rosehnbaum J, et al. INSM1: A Novel Immunohistochemical and Molecular Marker for Neuroendocrine and Neuroepithelial Neoplasms. *Am J Clin Pathol.* 2015; 144:579-91.
3. Rooper L, et al. INSM1 Demonstrates Superior Performance to the Individual and Combined Use of Synaptophysin, Chromogranin and CD56 for Diagnosing Neuroendocrine Tumors of the Thoracic Cavity. *Am J Surg Pathol.* 2017; 41:1561-1569.

Intended Use

The product herein is intended for laboratory use in the detection of INSM1 in formalin-fixed, paraffin-embedded tissue stained in qualitative immunohistochemistry (IHC) testing. This product is not a stand-alone diagnostic, and cannot be used for diagnosis, treatment, prevention, or mitigation of disease.

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