

# Actinin, alpha 4 (ACTN4)

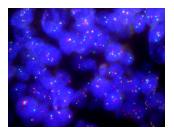
## **Specific Reagents**

The biological roles of ACTN4 have strong clinical implications in cancer metastasis and tumorigenesis. Amplification of *ACTN4* and the overexpression of its protein in cancer are utilized as biomarkers. With ACTN4 acting as a prognostic factor, Abnova's ACTN4 DNA probe has been widely used by researchers to investigate its amplification in lung adenocarcinoma, ovarian cancer and pancreatic cancer through FISH analysis. A companion Class I *In Vitro* Diagnostic (USA) ACTN4 monoclonal antibody was also designed for immunohistochemistry experiment to detect the correlation between protein overexpression and invasion of cancer cells with high sensitivity and specificity.

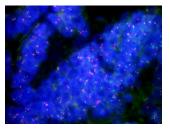
#### **Product Information**

Product	ACTN4 DNA Probe	Anti-ACTN4 Monoclonal Antibody (IVD)
Cat. No.	DF0002	DH0003
Usage	For detection of ACTN4 gene amplification using fluorescence in situ hybridization	For detection of ACTN4 protein overexpression using immunohistochemistry

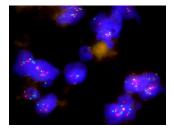
## **Application: DNA Hybridization**



Human lung adenocarcinoma stained with ACTN4 DNA Probe.

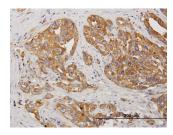


Human ovarian cancer stained with ACTN4 DNA Probe.

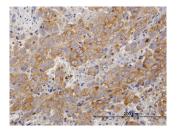


Human pancreatic cancer stained with ACTN4 DNA Probe.

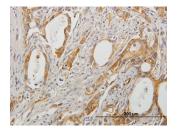
#### **Application: Immunohistochemistry**



Human lung adenocarcinoma stained with ACTN4 monoclonal antibody.



Human ovarian cancer stained with ACTN4 monoclonal antibody.



Human pancreatic cancer stained with ACTN4 monoclonal antibody.

### **Selected Publications**

- Watanabe T, Ueno H, Watabe Y, Hiraoka N, Morizane C, Itami J, Okusaka T, Miura N, Kakizaki T, Kakuya T, Kamita M, Tsuchida A, Nagakawa Y, Huang W, Yamada T, Honda KBr J Cancer. 2015 Feb 17;112(4):704-13.
- Watabe Y, Mori T, Yoshimoto S, Nomura T, Shibahara T, Yamada T, Honda KCancer Med. 2014 Feb 27.
- Noro R, Honda K, Tsuta K, Ishii G, Maeshima AM, Miura N, Furuta K, Shibata T, Tsuda H, Ochiai A, Sakuma T, Nishijima N, Gemma A, Asamura H, Nagai K, Yamada T.Ann Oncol. 2013 Jul 30.
- Yamamoto S, Tsuda H, Honda K, Onozato K, Takano M, Tamai S, Imoto I, Inazawa J, Yamada T, Matsubara O.Mod Pathol. 2009 Apr;22(4):499-507.