



## Anti-alpha actinin 4 , Rabbit-Polyclonal Antibody

**Catalog No.** GB-10371

**Antigen species:** Human

**Host species:** Rabbit

**Quantity:** 100µg

**Reactivity:** Human

**Form:** Peptide affinity purified antibody

**Applications tested:** ELISA

### Target description

The alpha-actinin-4 encoding gene (ACTN4) is not very well understood. It has been reported to elicit tumor suppressor activity and to regulate cellular motility. Enhanced motility of cancer cells by remodeling of the actin cytoskeleton seems crucial in the process of cancer invasion and metastasis. Actinin-4 may be a new biomarker of cancer invasion and an indicator of prognosis for patients with breast cancer. However, its involvement in the mechanisms of cancer invasion and metastasis remains undetermined.

### Antigen

This polyclonal antibody was raised by immunizing rabbit with a synthetic peptide of Actinin-4.

### Application

The antibody titer is more than 10K ELISA. It has not been tested in the other applications. However, for the first testing, we recommend 1/5,000 dilution for ELISA, 1/1000 dilution for Western blot analysis (WB) of recombinant protein, 1/400 dilution for tissue extracts or cell lysates, 1/100 dilution for immunohistochemistry (IHC) staining on frozen cryosections, 1/50 dilution for IHC staining on paraffin embedded sections.

### Related Products

1. Anti-MMP2 pAb (GB-10342).
2. Anti-BMP1 pAb (GB-10001).
3. Anti-MMP17 pAb (GB-10042).
4. Anti-MMP1 pAb (PY-10174).
5. Anti-MMP12(a.a.35-117) pAb (PY-10169).

Ab dilution	Pre-bleed	Purified-Ab
1:1K	0.152	1.716
1:10K	0.061	0.482
1:100K	0.053	0.094
Titer		78.2 K

### ELISA Protocol

Concentration of test purified pAb is 1.1 mg/ml

Antigen is coated on EIA strips at 1µg per well. Add 200µl of blocking buffer and then wash wells with PBST buffer. Antiserum or peptide specific purified antibody GB-10371 is diluted in series as  $10^3 \sim 10^5$  folds and added in separate wells. Incubate antibody for 1hr. Wash unbound antibodies and add anti-rabbit IgG-HRP conjugate. Wash the plates and add substrate to develop color for 10 min. Read absorbance (ABS) at 650 nm. Amount of color is directly proportional to the amount of antibodies.

### Storage

It is supplied as peptide affinity purified antibody in lyophilized powder. Redissolve the powder with 100 microliter sterile water will restore to the original concentration 1mg/ml (1xPBS). Store at 4°C for short-term application. For long-term storage, aliquot and store at -20°C.

### References

1. Honda K, Yamada T, Endo R, Ino Y, Gotoh M, Tsuda H, Yamada Y, Chiba H, Hirohashi S. Actinin-4 increases cell motility and promotes lymph node metastasis of colorectal cancer. *Gastroenterology*. 2005 Jan;128(1):51-62.
2. Menez J, Le Maux Chansac B, Dorothee G, Vergnon I, Jalil A, Carlier MF, Chouaib S, Mami-Chouaib F. Mutant alpha-actinin-4 promotes tumorigenicity and regulates cell motility of a human lung carcinoma. *Oncogene*. 2004 Apr 8;23(15):2630-9.