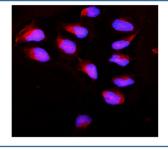


# Calpain Antibody (R31743)

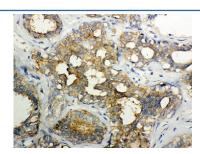
| Catalog No. | Formulation   | Size   |
|-------------|---|--------|
| R31743      | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

## **Bulk quote request**

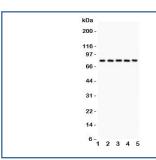
| Availability       | 1-3 business days  |
|--------------------|--|
| Species Reactivity | Human, Mouse, Rat  |
| Format             | Antigen affinity purified  |
| Clonality          | Polyclonal (rabbit origin)   |
| Isotype            | Rabbit IgG   |
| Purity             | Antigen affinity   |
| Buffer             | Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide  |
| Gene ID            | 823  |
| Applications       | Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml Immunofluorescence (FFPE) : 2-4ug/ml Flow Cytometry : 1-3ug/million cells |
| Limitations        | This Calpain antibody is available for research use only.  |



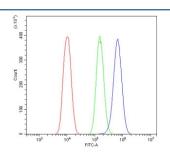
Immunofluorescent staining of FFPE human U-2 OS cells with Calpain antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



IHC-P: Calpain 1 antibody testing of human breast cancer tissue



Western blot testing of Calpain antibody and Lane 1: rat lung; 2: mouse lung; 3: human A549; 4: (h) COLO320; 5: (h) Jurkat. Predicted molecular weight: ~82 kDa.



Flow cytometry testing of human PC-3 cells with Calpain antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Calpain antibody.

#### **Description**

Calpain 1 is also known as CAPN, CAPN1 and muCL. The calpains, calcium-activated neutral proteases, are nonlysosomal, intracellular cysteine proteases. The mammalian calpains include ubiquitous, stomach-specific, and muscle-specific proteins. The ubiquitous enzymes consist of heterodimers with distinct large, catalytic subunits associated with a common small, regulatory subunit. The CPN1 gene encodes the catalytic subunit of the ubiquitous enzyme, Calpain 1. Several transcript variants encoding two different isoforms have been found for this gene.

### **Application Notes**

The stated application concentrations are suggested starting amounts. Titration of the Calpain antibody may be required due to differences in protocols and secondary/substrate sensitivity.

#### **Immunogen**

Human recombinant protein from the CAPN1 catalytic subunit (AA 396-555) was used as the immunogen for this Calpain antibody.

#### **Storage**

After reconstitution, the Calpain antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.