

**Actin  $\beta$  Polyclonal Antibody**  
Catalog # AP68282**Specification****Actin  $\beta$  Polyclonal Antibody - Product Information**

Application	IF
Primary Accession	<a href="#">P60709</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

**Actin  $\beta$  Polyclonal Antibody - Additional Information****Gene ID** 60**Other Names**

ACTB; Actin; cytoplasmic 1; Beta-actin

**Dilution**

IF~IF: 1:50-200 Western Blot: 1/1000 - 1/4000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**Actin  $\beta$  Polyclonal Antibody - Protein Information****Name** ACTB**Function**

Actin is a highly conserved protein that polymerizes to produce filaments that form cross-linked networks in the cytoplasm of cells (PubMed: [25255767](http://www.uniprot.org/citations/25255767), PubMed: [29581253](http://www.uniprot.org/citations/29581253)). Actin exists in both monomeric (G-actin) and polymeric (F-actin) forms, both forms playing key functions, such as cell motility and contraction (PubMed: [29581253](http://www.uniprot.org/citations/29581253)). In addition to their role in the cytoplasmic cytoskeleton, G- and F- actin also localize in the nucleus, and regulate gene transcription and motility and repair of damaged DNA (PubMed: [29925947](http://www.uniprot.org/citations/29925947)). Part of the ACTR1A/ACTB filament around which the dynactin complex is built. The dynactin multiprotein complex activates the molecular motor dynein for ultra-processive transport along microtubules (By similarity).

**Cellular Location**

Cytoplasm, cytoskeleton. Nucleus Note=Localized in cytoplasmic mRNP granules containing

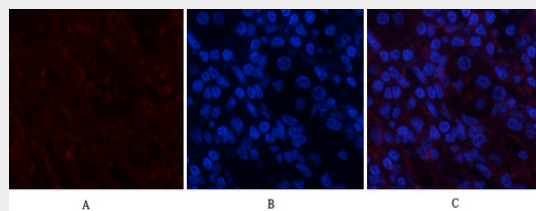
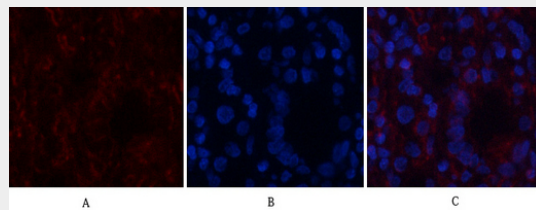
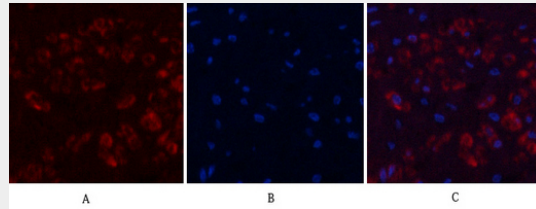
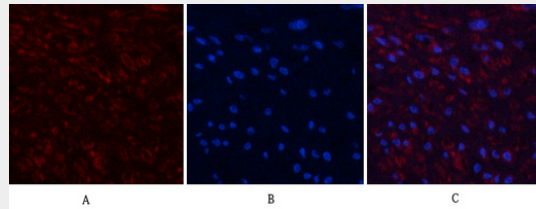
untranslated mRNAs.

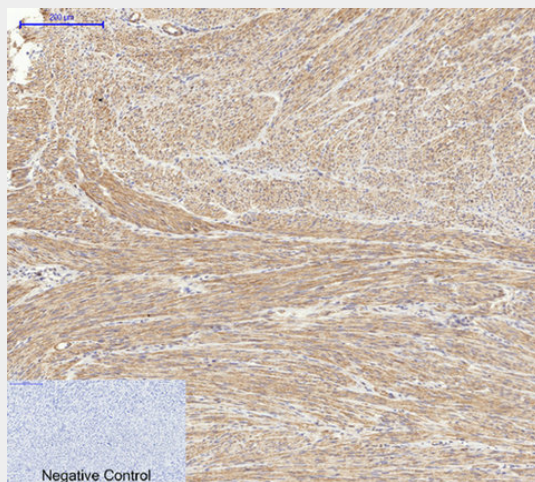
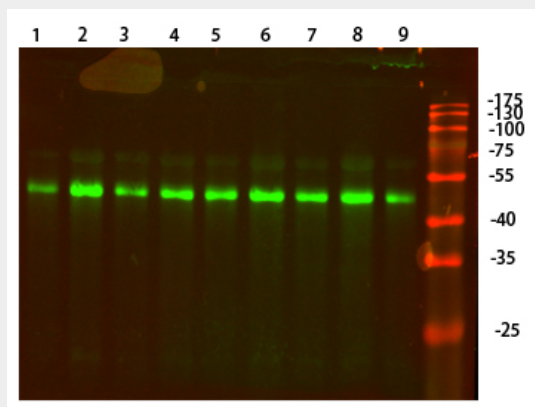
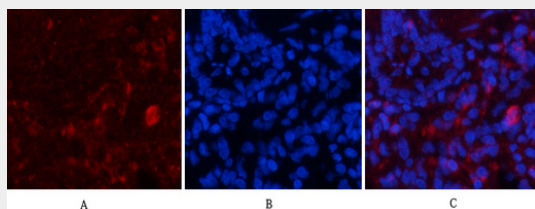
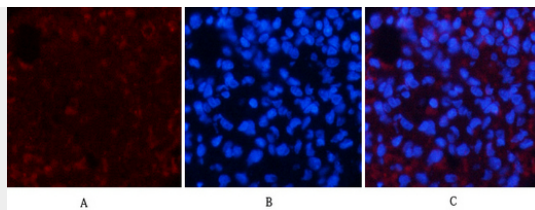
### Actin $\beta$ Polyclonal Antibody - Protocols

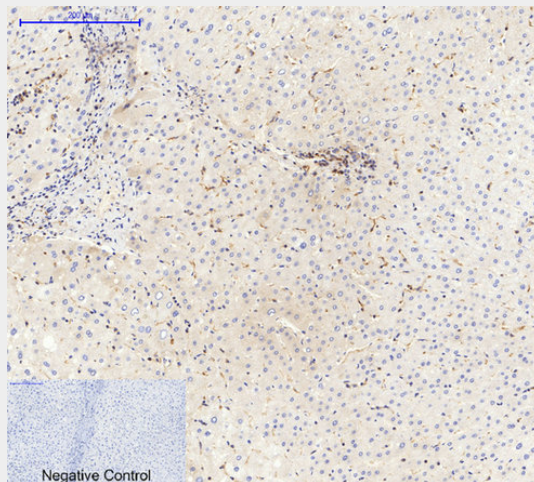
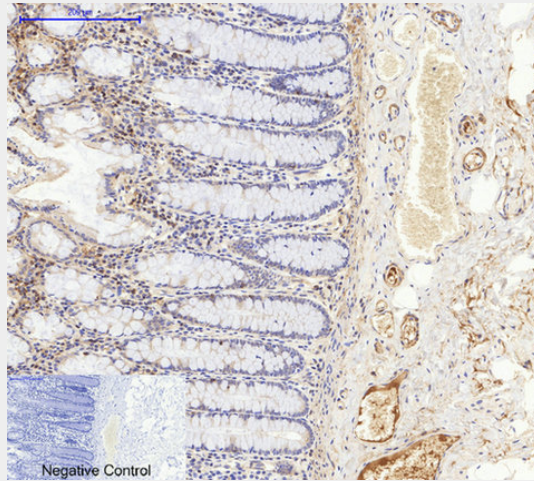
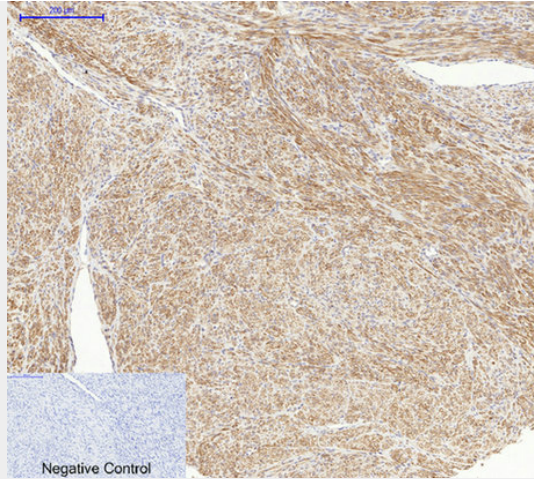
Provided below are standard protocols that you may find useful for product applications.

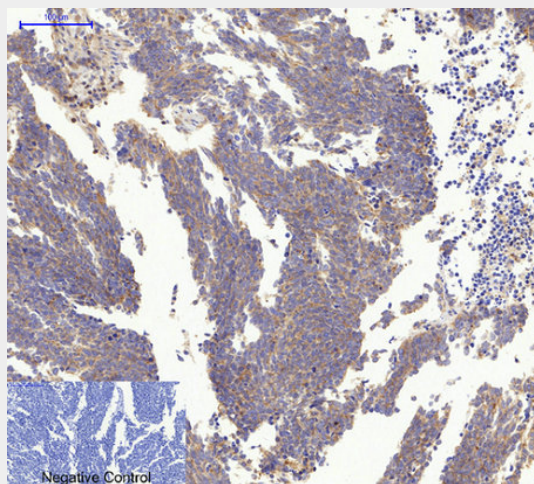
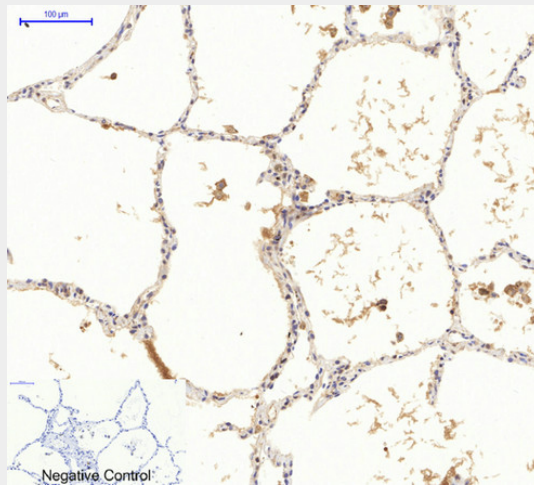
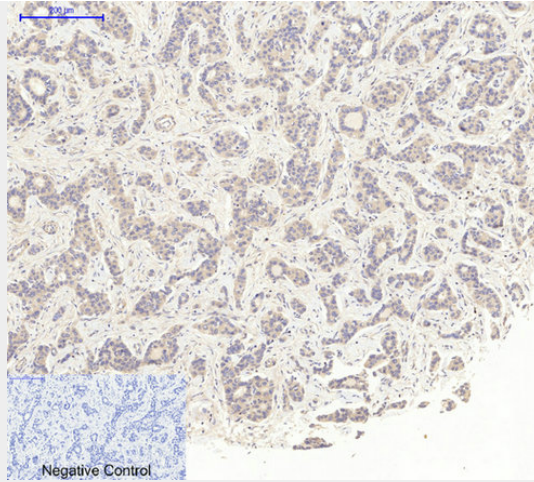
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

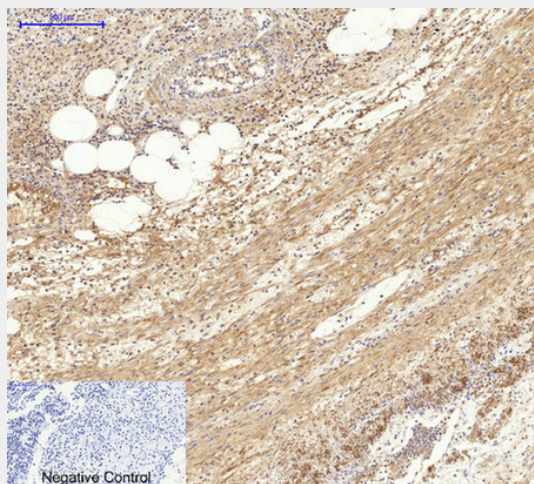
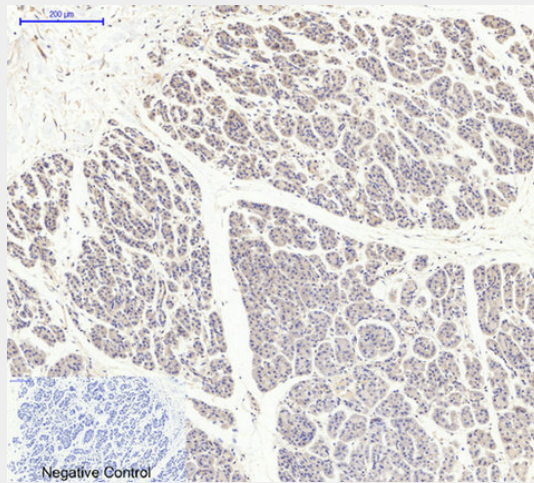
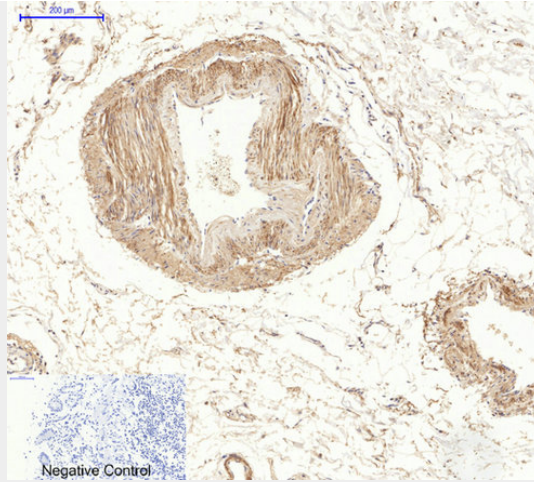
### Actin $\beta$ Polyclonal Antibody - Images

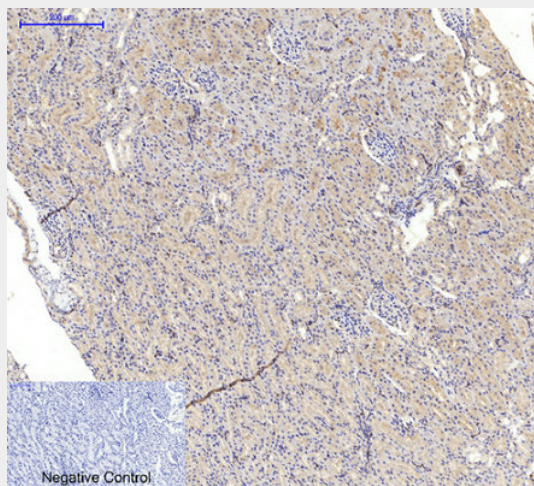
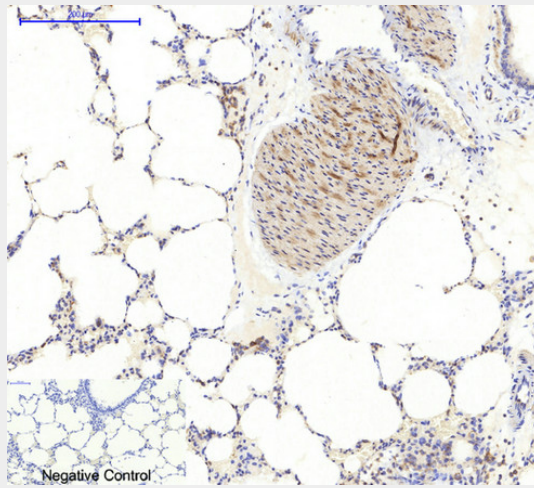
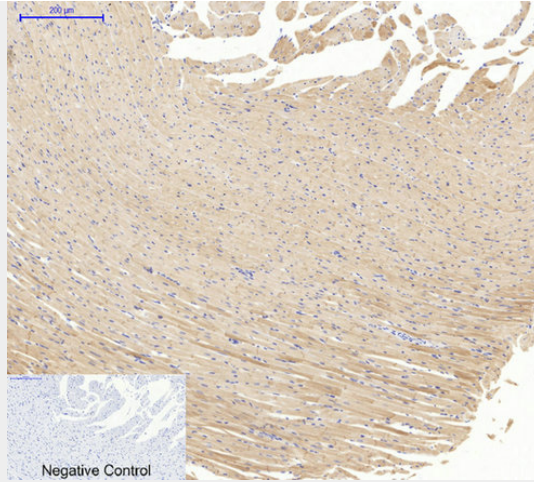


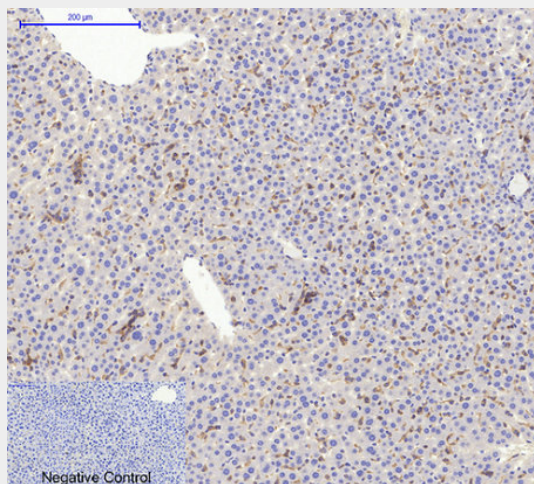
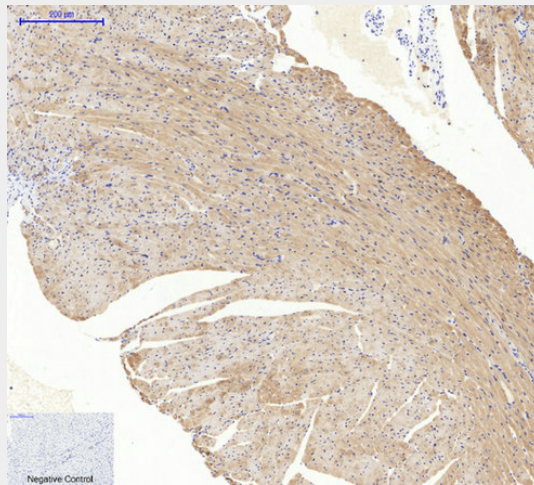
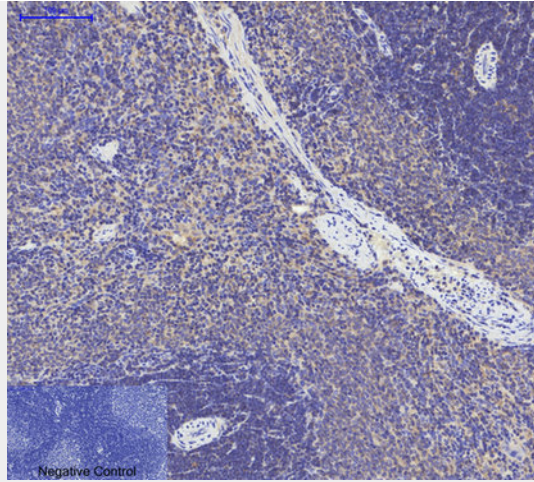




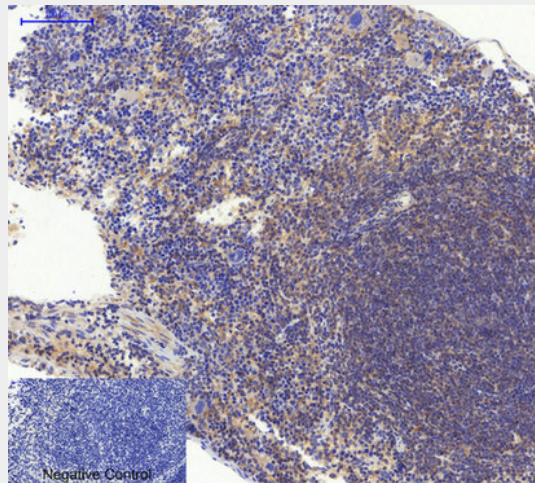
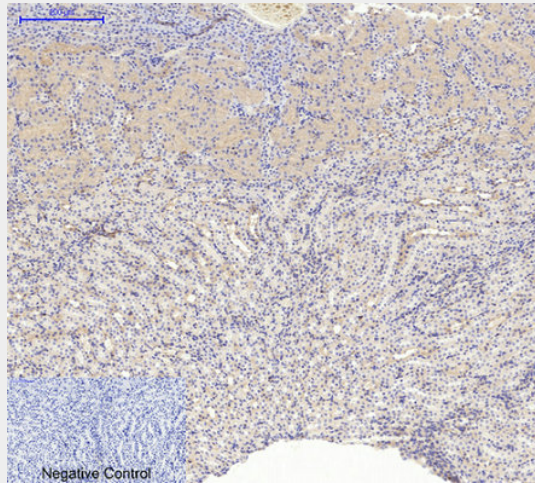
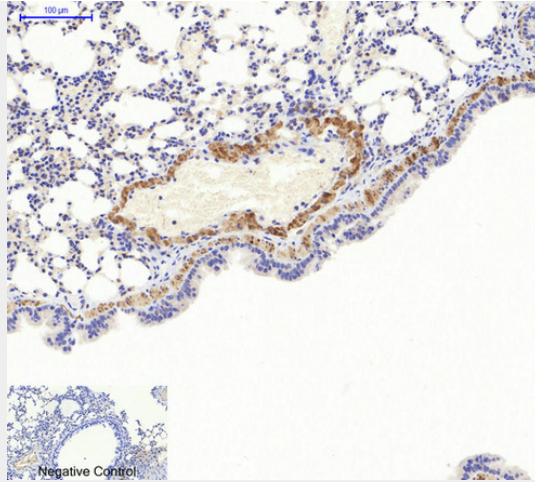


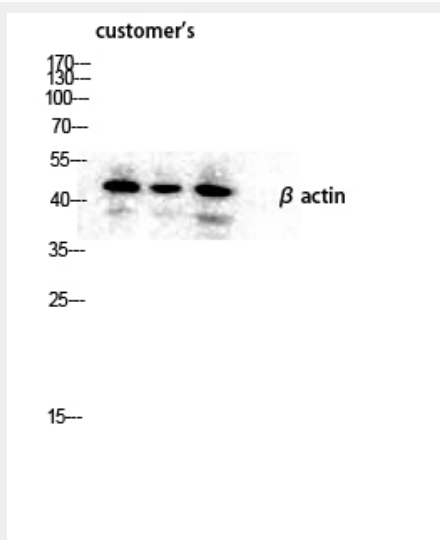
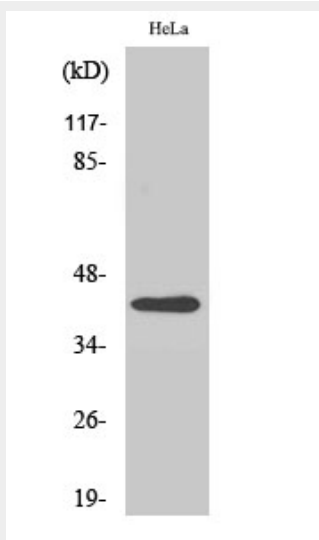
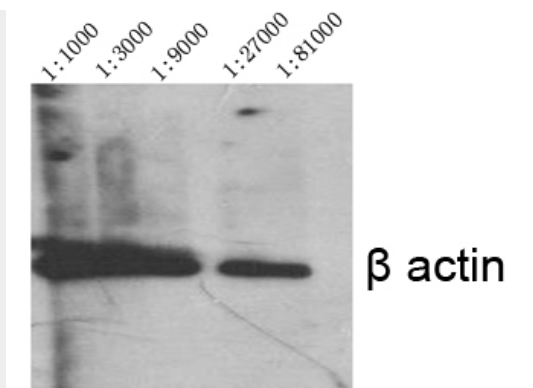


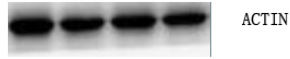




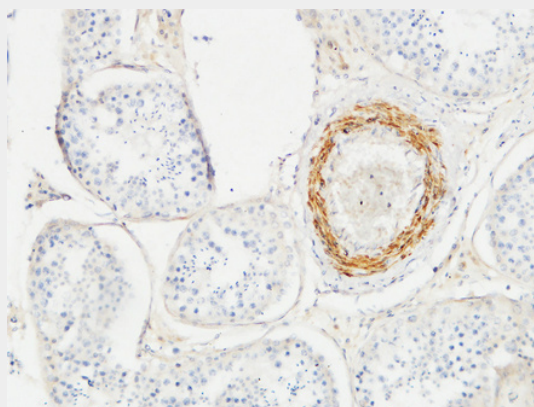
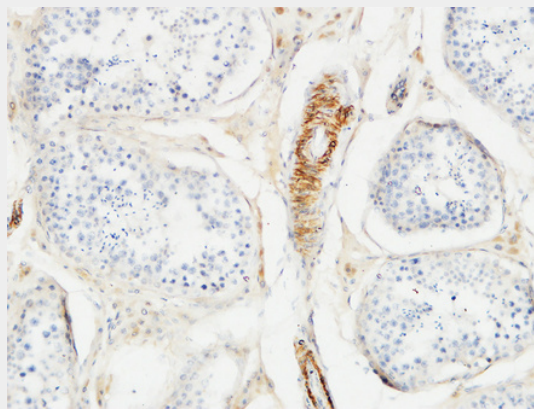
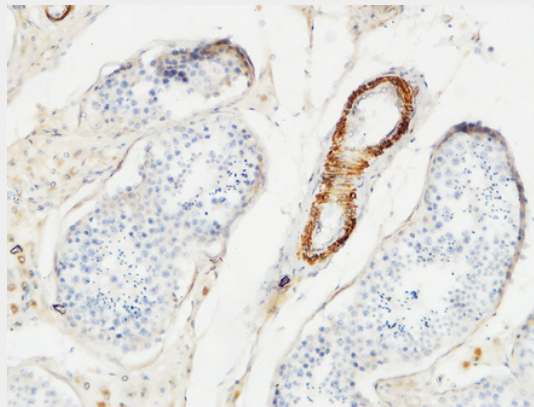








The First Affiliated Hospital of China Medical University  
Dr.HouDianDong



## **Actin $\beta$ Polyclonal Antibody - Background**

Actin is a highly conserved protein that polymerizes to produce filaments that form cross-linked networks in the cytoplasm of cells (PubMed:29581253). Actin exists in both monomeric (G- actin) and polymeric (F-actin) forms, both forms playing key functions, such as cell motility and contraction (PubMed:29581253). In addition to their role in the cytoplasmic cytoskeleton, G- and F-actin also localize in the nucleus, and regulate gene transcription and motility and repair of damaged DNA (PubMed:29925947).