

**Mouse anti Actin (Smooth Muscle) Antibody**  
**Clone: 1A4**

Storage: 2-8°C

Catalog No: M1008

1ml  
0.2ml  
6ml

**Intended Use and Background:**

Mouse anti Actin (Smooth muscle) antibody (mouse IgG2a isotype) is specific for the alpha isoform  $\alpha$ -actin. It provides a qualitative determination of the actin in formalin-fixed paraffin-embedded human tissue section. Actin is a highly conserved skeletal protein existing in muscle and non-muscle cells. Alpha isotype is found exclusively in muscle cells. Clone 1A4 reacts with  $\alpha$ -smooth muscle actin. It does not cross react with skeletal or cardiac muscle actin, mesenchymal cells, epithelial cells, or other cytoskeletal components.

**Kit Components:**

Mouse anti-Actin Antibody is from mouse ascites fluid and preserved in PBS buffer containing BSA and 0.1% sodium azide.

Clone: 1A4  
Isotype: IgG<sub>2a</sub>  
Immunogen: Actin synthetic peptide  
Reacts with: Human, mouse, rat, bovine, chicken, goat, guinea pig, rabbit, dog, and sheep.

Catalog No.	Format	Size
M1008	Concentrate	1 ml
M1008s	Concentrate	0.2ml
M1008U	Ready-to-use	6ml

**Positive Control Tissue:** Smooth muscle

**Staining pattern:** Cytoplasmic

**Pretreatment required:** Not required

**Recommended Protocol:**

Application tested: ELISA, IHC (FFPE). Working dilution for formalin-fixed paraffin-embedded human tissue section is from 1:50-200 depending on the detection system used. Optimal dilution needs to be determined by the investigator.

Manual staining procedure:

1. Deparaffinize slides
2. Submerge slides in peroxidase quenching solution for 10 minutes and rinse with PBS 3 times, 2 minutes each.
3. Apply serum blocking solution (optional if use polymer detection system)
4. Apply primary antibody and incubate for 30-60 minutes at room temperature and rinse with PBS 3 times, 2 minutes each.
5. Apply secondary antibody and incubate according to the data sheet of detection system. Rinse with PBS 3 times, 2 minutes each.
6. Apply enzyme conjugate and incubate according to the data sheet of detection system. Rinse with PBS 3 times, 2 minutes each.
7. Apply chromogen and incubate 5-10 minutes and rinse with PBS.

**Precaution:**

Wear gloves and take other necessary laboratory safety procedure.

**Storage:** Store at 2-8°C.

**Remarks:** For research use only. Not for diagnostic or therapeutic use.