# Anti-Follistatin Antibody

## ER1901-69

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|---|---|
| **Product Type:** | Rabbit polyclonal IgG, primary antibodies |
| **Species reactivity:** | Human, Rat |
| **Applications:** | WB, IHC-P, IF-Cell, FC |
| **Molecular Wt:** | Predicted band size 38 kDa. |

**Description:** Follistatin also known as activin-binding protein is a protein that in humans is encoded by the FST gene. Follistatin is an autocrine glycoprotein that is expressed in nearly all tissues of higher animals. Its primary function is the binding and bioneutralization of members of the TGF-β superfamily, with a particular focus on activin, a paracrine hormone.Binds directly to activin and functions as an activin antagonist. Specific inhibitor of the biosynthesis and secretion of pituitary follicle stimulating hormone (FSH).

**Immunogen:** Recombinant protein within Human Follistatin aa 11-216 / 344.

**Positive control:** Rat colon tissue lysates, Raji cell lysates, Hela, MCF-7, human placenta tissue, HepG2.

**Subcellular location:** Secreted.

**Database links:** SwissProt: P19883 Human | P21674 Rat

**Recommended Dilutions:**

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|---|---|
| **WB** | 1:500-1:2000 |
| **IHC-P** | 1:50-1:200 |
| **IF-Cell** | 1:50-1:200 |
| **FC** | 1:50-1:100 |

**Storage Buffer:** 1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

**Storage Instruction:** Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

**Purity:** Immunogen affinity purified.

## Images

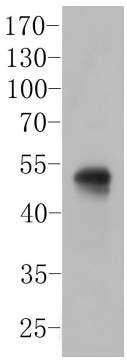


**Fig1:** Western blot analysis of Follistatin on Rat colon tissue lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (ER1901-69, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:5,000 dilution was used for 1 hour at room temperature.

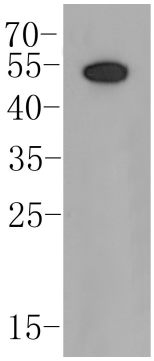


**Fig2:** Western blot analysis of Follistatin on Raji cell lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (ER1901-69, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:5,000 dilution was used for 1 hour at room temperature.

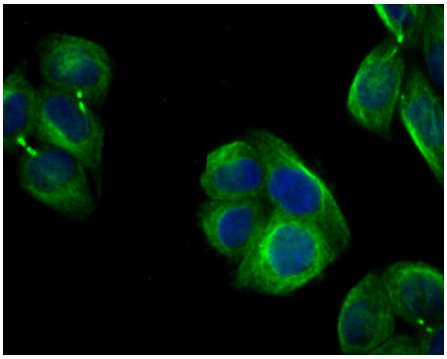

**Fig3:** ICC staining of Follistatin in Hela cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the primary antibody (ER1901-69, 1/100) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/100 dilution. The nuclear counter stain is DAPI (blue).

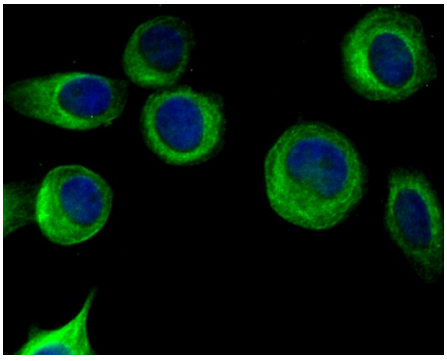

**Fig4:** ICC staining of Follistatin in MCF-7 cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the primary antibody (ER1901-69, 1/100) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/100 dilution. The nuclear counter stain is DAPI (blue).

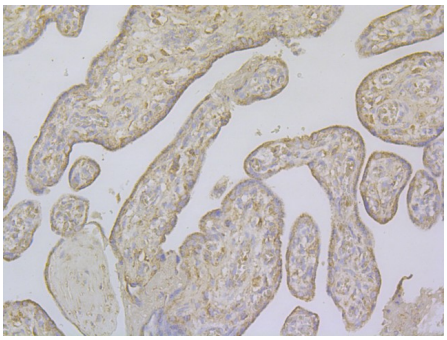

**Fig5:** Immunohistochemical analysis of paraffin-embedded human placenta tissue using anti-Follistatin antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with dd$H_2O$ and PBS, and then probed with the primary antibody (ER1901-69, 1/100) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

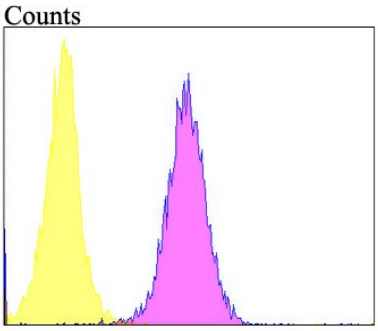


**Fig6:** Flow cytometric analysis of Follistatin was done on HepG2 cells. The cells were fixed, permeabilized and stained with the primary antibody (ER1901-69, 1/100) (purple). After incubation of the primary antibody at room temperature for an hour, the cells were stained with a Alexa Fluor 488-conjugated goat anti-rabbit IgG Secondary antibody at 1/500 dilution for 30 minutes.Unlabelled sample was used as a control (cells without incubation with primary antibody; yellow).

**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

## Background References

1. Zhang Z et al. Signal peptide prediction based on analysis of experimentally verified cleavage sites. Protein Sci 13:2819-2824 (2004).
2. Thompson T B et al. The structure of the follistatin:activin complex reveals antagonism of both type I and type II receptor binding. Dev Cell 9:535-543 (2005).