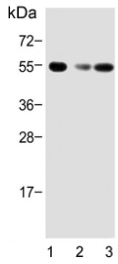
# Activin receptor type-1B Antibody (F54951)

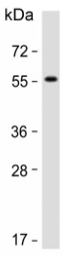
| Catalog No. | Formulation | Size |
|---|---|---|
| F54951-0.4ML | In 1X PBS, pH 7.4, with 0.09% sodium azide | 0.4 ml |
| F54951-0.08ML | In 1X PBS, pH 7.4, with 0.09% sodium azide | 0.08 ml |

**Bulk quote request**

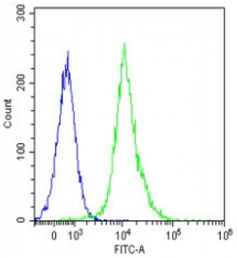
| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human, Mouse, Rat |
| **Format** | Purified |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit Ig |
| **Purity** | Antigen affinity purified |
| **UniProt** | P36896 |
| **Applications** | Western Blot : 1:500-1:1000<br>Flow Cytometry : 1:25 (1x10e6 cells) |
| **Limitations** | This Activin receptor type-1B antibody is available for research use only. |




Western blot testing of 1) human brain, 2) mouse brain and 3) rat brain tissue lysate with Activin receptor type-1B antibody. Predicted molecular weight ~57 kDa.




Western blot testing of human liver tissue lysate with Activin receptor type-1B antibody. Predicted molecular weight ~57 kDa.




Flow cytometry testing of fixed and permeabilized human Jurkat cells with Activin receptor type-1B antibody; Blue=isotype control, Green= Activin receptor type-1B antibody.

## Description

Activins are dimeric growth and differentiation factors which belong to the transforming growth factor-beta (TGF-beta) superfamily of structurally related signaling proteins. Activins signal through a heteromeric complex of receptor serine kinases which include at least two type I (I and IB) and two type II (II and IIB) receptors. These receptors are all transmembrane proteins, composed of a ligand-binding extracellular domain with a cysteine-rich region, a transmembrane domain, and a cytoplasmic domain with predicted serine/threonine specificity. Type I receptors are essential for signaling, and type II receptors are required for binding ligands and for expression of type I receptors. Type I and II receptors form a stable complex after ligand binding, resulting in phosphorylation of type I receptors by type II receptors. The gene for ACVR1B (activin A type IB receptor) is composed of 11 exons. Alternative splicing and alternative polyadenylation result in 3 fully described transcript variants. The mRNA expression of variants 1, 2, and 3 is confirmed, and a potential fourth variant contains an alternative exon 8 and lacks exons 9 through 11, but its mRNA expression has not been confirmed.

## Application Notes

The stated application concentrations are suggested starting points. Titration of the Activin receptor type-1B antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

A portion of amino acids 39-68 from the human protein was used as the immunogen for the Activin receptor type-1B antibody.

## Storage

Aliquot the Activin receptor type-1B antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.