

Anti-ACVR2B hIgG1 Antibody(Bimagrumab)

Product information

GM-51148AB-10	10 µg
GM-51148AB-100	100 µg
GM-51148AB-1000	1 mg

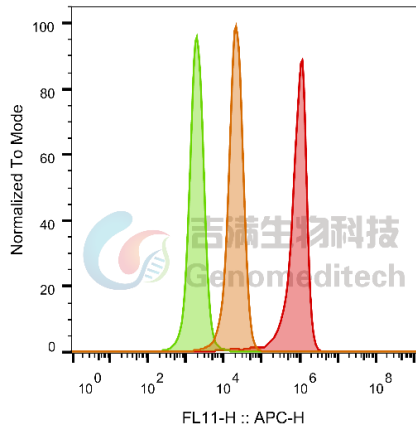
Antibody Information

Species Reactivity	Human; Mouse
Clone	Bimagrumab
Source/Isotype	Monoclonal Human IgG1 /λ
Application	Flow Cytometry; Block assay; Bioactivity-ELISA
Target	Detects ACVR2A & ACVR2B
Gene	ACVR2B
Other Names	HTX4; ACTRIIB; ActR-IIB
Gene ID	93 (Human), 11481 (Mouse)
Background	ACVR2B is an activin type 2 receptor. 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. ACVR2B binds to activin and growth differentiation factor (GDF), which in turn activates type I receptors and activates downstream molecules. In addition, mutations in this gene may affect protein function in left and right axis formation and cardiovascular development, as well as reduce muscle mass and bone mass.
Storage	Store at 2-8°C short term (1-2 weeks).Store at ≤ -20°C long term. Avoid repeated freeze-thaw.
Formulation	Phosphate-buffered solution, pH 7.2.
Endotoxin	< 1 EU/mg, determined by LAL gel clotting assay

Data Examples

Flow cytometry

H_ACVR2B Reporter Cell Line (Catalog # GM-C26076) was stained with Anti-ACVR2B hlgG1 Antibody(Bimagrumab) (Catalog # GM-51148AB) or isotype control antibody, followed by anti-Human IgG APC-conjugated Secondary Antibody.

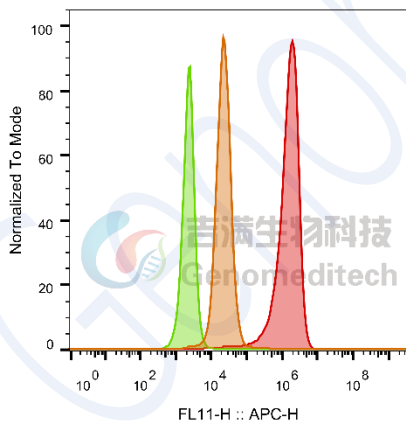


SampleID	Geometric Mean : FL11-H
Null anti-ACVR2B+APC-2nd Ab	20282
H_ACVR2B Reporter H_IgG+APC-2nd Ab	1973
H_ACVR2B Reporter anti-ACVR2B+APC-2nd Ab	7.89E5

Fig. FACS

Flow cytometry

H_ACVR2B HEK-293(ACVR2A KO) Cell Line (Catalog # GM-C34942) was stained with Anti-ACVR2B hlgG1 Antibody(Bimagrumab) (Catalog # GM-51148AB) or isotype control antibody, followed by anti-Human IgG APC-conjugated Secondary Antibody.

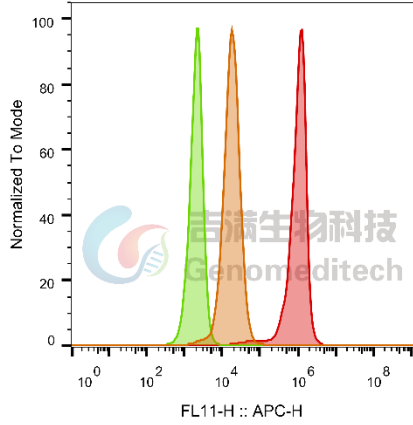


SampleID	Geometric Mean : FL11-H
HEK-293 anti-ACVR2B+APC-2nd Ab	22415
HEK-293 H_ACVR2B(2A KO) H_IgG+APC-2nd Ab	2293
HEK-293 H_ACVR2B(2A KO) anti-ACVR2B+APC-2nd Ab	1.36E6

Fig. FACS

Flow cytometry

H_ACVR2A HEK-293(ACVR2B KO) Cell Line (Catalog # GM-C34941) was stained with Anti-ACVR2B hIgG1 Antibody(Bimagrumab) (Catalog # GM-51148AB) or isotype control antibody, followed by anti-Human IgG APC-conjugated Secondary Antibody.



SampleID	Geometric Mean : FL11-H
HEK-293 anti-ACVR2B+APC-2nd Ab	17485
HEK-293 H_ACVR2A(2B KO) H_igG+APC-2nd Ab	2039
HEK-293 H_ACVR2A(2B KO) anti-ACVR2B+APC-2nd Ab	9.06E5

Fig. FACS

Block assay

Anti-ACVR2B hIgG1 Antibody(Bimagrumab) (Catalog # GM-51148AB) inhibits H_ACVR2B Reporter Cell Line (Catalog # GM-C26076) Luminescence induced by GDF-8 Protein. IC50 for this effect is 0.5846 µg/mL.

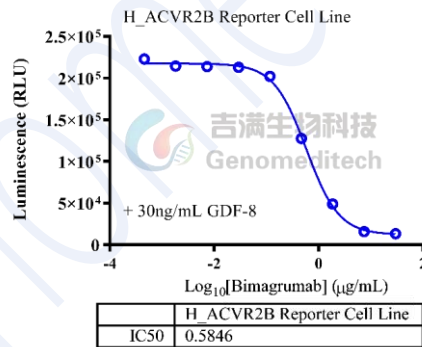


Fig. assay

Block assay

Anti-ACVR2B hIgG1 Antibody(Bimagrumab) (Catalog # GM-51148AB) inhibits H_ACVR2B Reporter Cell Line (Catalog # GM-C26076) Luminescence induced by Human Activin A Protein; His Tag (Catalog # GM-87616RP). IC50 for this effect is 0.106 µg/mL.

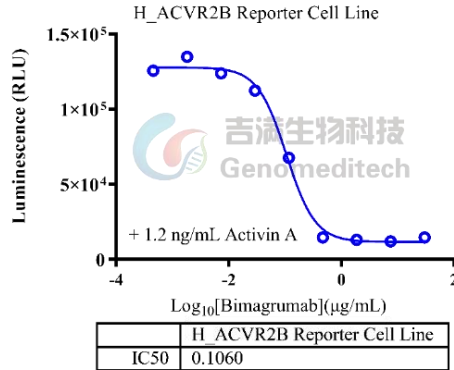


Fig. assay

Bioactivity-ELISA

Human ACVR2B Protein; His Tag (Catalog # GM-84198RP) was immobilized at 5 µg/ml (100 µL/well). Increasing concentrations of Anti-ACVR2B hIgG1 Antibody (Bimagrumab) (Catalog # GM-51148AB) were added.

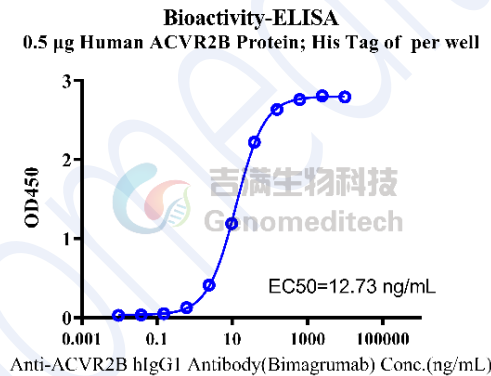
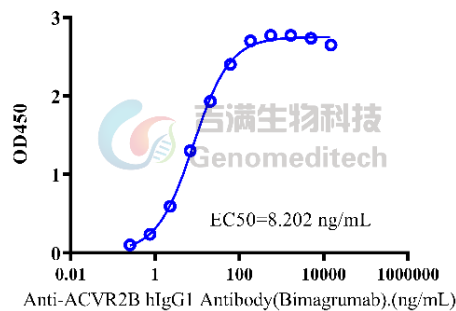


Fig. Assay

Bioactivity-ELISA

Biotinylated Human ACVR2B Protein; His-Avi Tag (Catalog # GM-84407RP) was immobilized at 5 µg/ml (100 µL/well) on streptavidin precoated. Increasing concentrations of Anti-ACVR2B hIgG1 Antibody (Bimagrumab) (Catalog # GM-51148AB) were added.

Biotinylated Human ACVR2B Protein; His-Avi Tag, ELISA
 0.5 µg Biotinylated Human ACVR2B Protein; His-Avi Tag of per well



Version:3.4

Fig. Assay

Bioactivity-ELISA

Human ACVR2A Protein; His Tag (Catalog # GM-87256RP) was immobilized at 1 µg/ml (100 µL/well). Increasing concentrations of Anti-ACVR2B hIgG1 Antibody(Bimagrumab) (Catalog # GM-51148AB) were added.

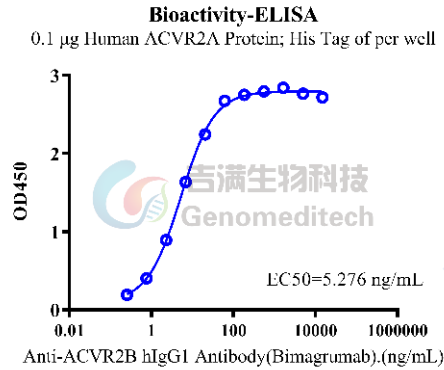


Fig. Assay

Bioactivity-ELISA

Mouse ACVR2A Protein; His Tag (Catalog # GM-87258RP) was immobilized at 1 µg/ml (100 µL/well). Increasing concentrations of Anti-ACVR2B hIgG1 Antibody(Bimagrumab) (Catalog # GM-51148AB) were added.

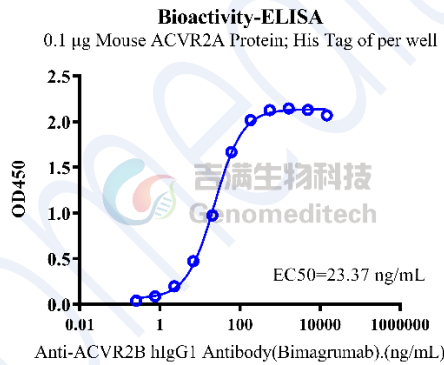


Fig. Assay