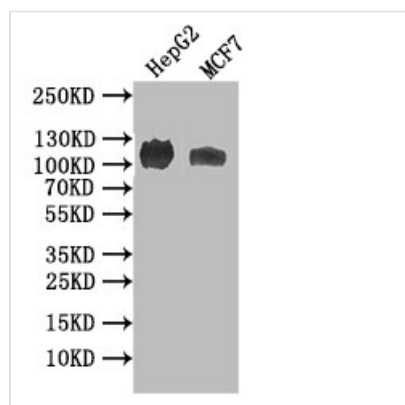




NPR2 Recombinant Monoclonal Antibody

Product Code	CSB-RA926985A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P20594
Immunogen	A synthesized peptide derived from Human NPR2
Species Reactivity	Human
Tested Applications	ELISA, WB, IF, FC; Recommended dilution: WB:1:500-1:2000, IF:1:50-1:200, FC:1:50-1:200
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Neuroscience;Cardiovascular;Signal transduction
Gene Names	NPR2
Clone No.	19C7

Image



Western Blot

Positive WB detected in: HEPG2 whole cell lysate, MCF7 whole cell lysate

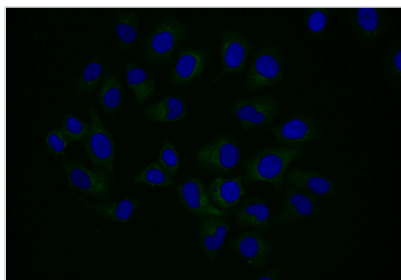
All lanes: ANPRB antibody at 1:1000

Secondary

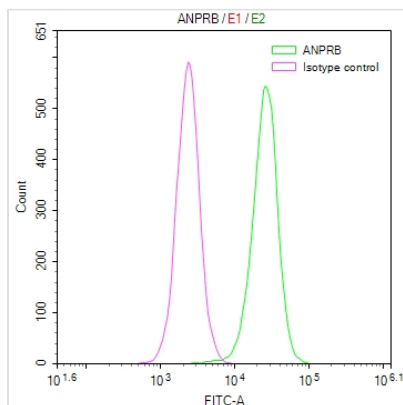
Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 117 kDa

Observed band size: 117 kDa



Immunofluorescence staining of HeLa with CSB-RA926985A0HU at 1:25, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 501-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Overlay Peak curve showing HeLa cells surface stained with CSB-RA926985A0HU (red line) at 1:50. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1μg/1*10⁶cells) for 45min at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4°C. Control antibody (green line) was rabbit IgG (1μg/1*10⁶cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The NPR2 recombinant monoclonal antibody is generated in vitro using synthetic genes. The technology involves recovering NPR2 antibody genes from B cells isolated from the immunoreactive rabbits, amplifying and cloning the genes into appropriate phage vectors, introducing the vectors into mammalian cell lines, and achieving expression of adequate amounts of functional antibody. The resulting NPR2 recombinant monoclonal antibody is purified from the culture supernatant of the transfected cell lines through affinity chromatography. It can be used in the ELISA, WB, IF, and FC applications to detect the human NPR2 protein.

NPR2 is a receptor for natriuretic peptides that plays a vital role in regulating blood pressure, fluid balance, and electrolyte homeostasis. Its activation promotes vasodilation, natriuresis, and diuresis, all of which help maintain cardiovascular and renal health while counteracting conditions like hypertension and heart failure.