ICOSAGEN

Chicken polyclonal antibody to human GFRa-1

Catalogue #	303-100
Immunogen:	human GFRa-1
Immunogen Description:	Recombinant His-tagged human GFRa-1 protein produced using CHO-based Icosagen Cell factory Ltd. proprietary suspension cell line. For production of hGFRa-1, glycosylphosphatidyl-inositol GPI-anchor was removed and protein was secreted to the cell culture supernatant. Protein was purified by Ni-affinity chromatography following gel-filtration from cell culture supernatant
Alternative Names:	RET ligand 1, TGF-beta related neurotrophic factor receptor 1
Uniprot ID:	P56159
Clonality:	Polyclonal
Class:	IgY
Reactivity:	Human GFRa-1 Doesn't cross-react with hGFRa-2, hGFRa-3, hGFRa-4
Application:	ELISA, WB, IF
Protocol:	Polyclonal antibody working titer has to be established practically for each particular antigen and assay format
ELISA:	0,02-0,05 µg/ml
IF:	0,5-1 µg/ml
Purification:	GFRa-1 affinity purified
Buffer:	Concentrated ammonium sulphate in PBS pH 7.4
Shipping:	This product is shipped in non-frozen liquid form in ambient conditions
Storage:	Store at +4 °C upon receipt. As product is (NH4)2SO4 precipitate, mix well by pipetting or vortexing prior use

Background: Glial cell line-derived neurotrophic factor (GDNF) and neurturin (NTN) are two structurally related, potent neurotrophic factors that play key roles in the control of neuron survival and differentiation. The GFRa-1 is a member of the GDNF receptor family. It is a glycosylphosphatidylinositol (GPI)-linked cell surface receptor for both GDNF and NTN, and mediates activation of the RET tyrosine kinase receptor (www.ncbi.nlm.nih.gov/gene/2674)
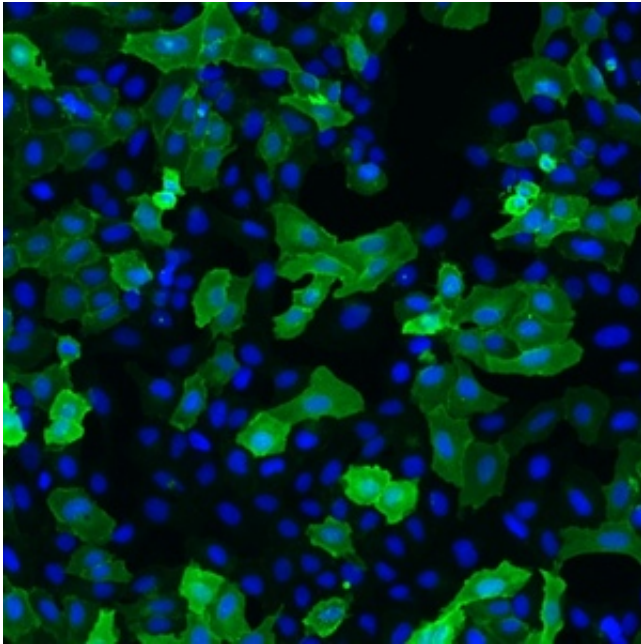

Figure 1. Immunofluorescence detection of human GFR?-1 expressed in U2OS cells. GFR?-1 was visualized using Chicken polyclonal antibody to human GFR?-1 (dilution 1:2000) and Goat anti-chicken IgY – H&L DyLight 550 (Abcam, ab96952) (dilution 1:200) as secondary antibody. For nuclear staining DAPI was used. ArrayScan VTI platform (Thermo Scientific) was used for image acquisition (10x objective). Composite picture was generated using pseudocolors green for GFR?-1 specific signal and blue for nuclei.
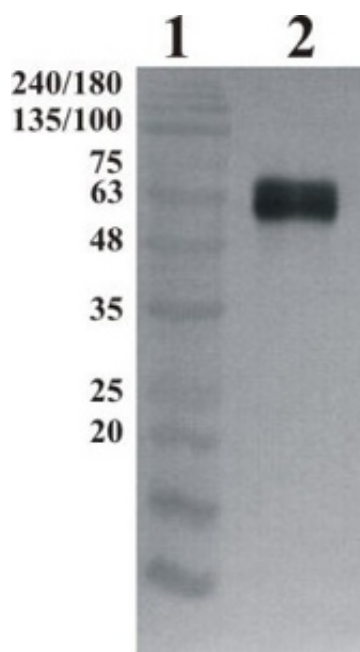
Figure 2. Western-Blot detection of human GFR?-1, using Chicken polyclonal antibody to human GFR?-1. GFR?-1 was C-terminally His tagged. Protein was expressed by CHO cell culture. 100 ng of purified protein was loaded per lane. Line 1. Prestained protein ladder (Naxo 8003). Line 2. hGFR?-1. Primary antibody dilution 1:5000 was used. Rabbit anti-chicken antibody (Icosagen) was used as secondary antibody.