

# Product Datasheet

## GPR50 Antibody - Azide and BSA Free H00009248-B01P

Unit Size: 0.05 mg

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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**H00009248-B01P**

GPR50 Antibody - Azide and BSA Free

Product Information	
Unit Size	0.05 mg
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	No Preservative
Isotype	IgG
Purity	Protein A purified
Buffer	PBS (pH 7.4)

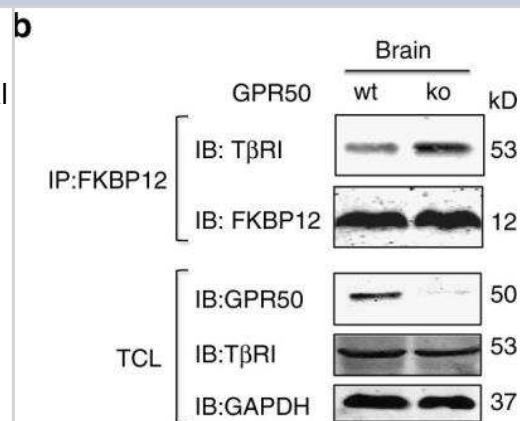
Product Description	
Description	Novus Biologicals Knockout (KO) Validated Mouse GPR50 Antibody - Azide and BSA Free (H00009248-B01P) is a polyclonal antibody validated for use in WB and Flow. Anti-GPR50 Antibody: Cited in 1 publication. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	9248
Gene Symbol	GPR50
Species	Human, Mouse, Rat
Reactivity Notes	Use in Rat reported in scientific literature (PMID:29572483).
Specificity/Sensitivity	Reacts with G protein-coupled receptor 50.
Immunogen	GPR50 (AAI03697.1, 1 a.a. - 617 a.a.) full-length human protein. MGPTLAVPTPYGCIGCKLPQPEYPPALIIFMFCAMVITIVVDLIGNSMVILAVTKN KCLRNSGNIFVVSLSVADMLVAIYPYPLMLHAMSIGGWDLSQLQCQMVGFITGL SVVGSIFNIVAIAINRYCYICHSLQYERIFSVRNTCIYL VITWIMTVLAVLPNMYIGTI EYDPRTYTCIFNYLNNPVFTVTIVCIHFVLP LLIVGFCYVRIWTKVLAARDPAGQN PDNQLAEVRNFLT MFVIFLLFAVCWC PINVLTVLVAVSPKEMAGKIPNWLYLAAY FIAYFNSCLNAVIYGLLNENFRREYWTIFHAMRHPIIFFSGLISDIREMQEARTLA RARAHARDQAREQDRAHACPAVEETPMNVRNVPLPGDAAAGHPDRASGHPK PHSRSSSAYRKSASTHHKSVFESHKAASGHLKPVSGHSPASGHPKSATVYP KPASVHFKADSVHFKGDSVHFKPDSVHFKPASSNPKPITGHHVSAGSHSKSAF SAATSHPKPTTGHIKPATSHA EPTTADY PKPATTSHPKPTAADNPELSASHCPE IPAIAHPVSDDSDLPESASSPAAGPTKPAASQLES DTIADLPDPTVTTSTNDYH DVVVVDVEDDPDEMAV
Notes	This product is produced by and distributed for Abnova, a company based in Taiwan.

Product Application Details	
Applications	Western Blot, Flow Cytometry, Knockout Validated
Recommended Dilutions	Western Blot 1:500, Flow Cytometry, Knockout Validated
Application Notes	This antibody is reactive against transfected lysate in western blot, FACS analysis, and as a detection antibody in ELISA. It is also useful in FACS analysis.

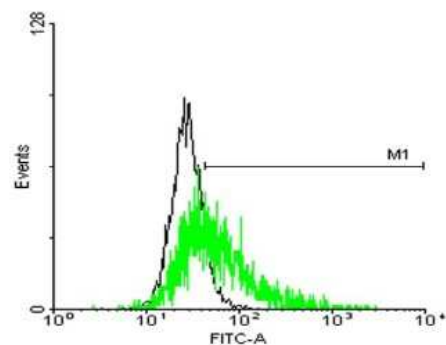


## Images

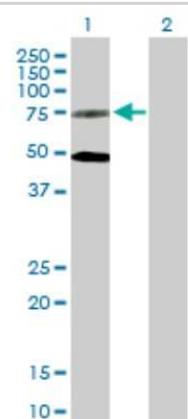
**Western Blot: GPR50 Antibody [H00009248-B01P]** - GPR50 competes with FKBP12 for the binding to TBRI. Competition between FKBP12 and GPR50 for TBRI binding was checked by precipitating FKBP12 from total brain and lung lysates of wt and GPR50ko mice and revealed with anti-TVRI. Total lysate was addressed for expression of FKBP12, TBRI, and GPR50 with corresponding antibodies. Image collected and cropped by CiteAb from the following publication ([nature.com/articles/s41467-018-03609-x](https://www.nature.com/articles/s41467-018-03609-x)), licensed under a CC-BY license.



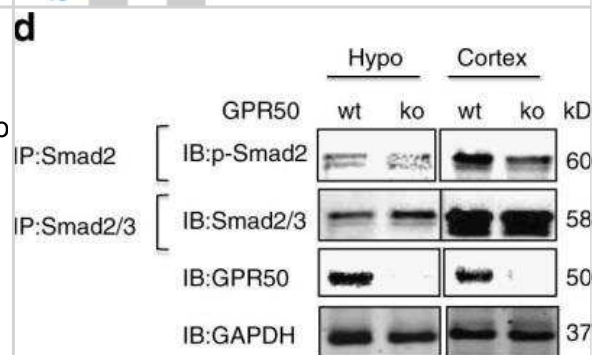
**Flow Cytometry: GPR50 Antibody [H00009248-B01P]** - Analysis of negative control 293 cells (Black) and GPR50 expressing 293 cells (Green) using GPR50 purified mouse polyclonal antibody.



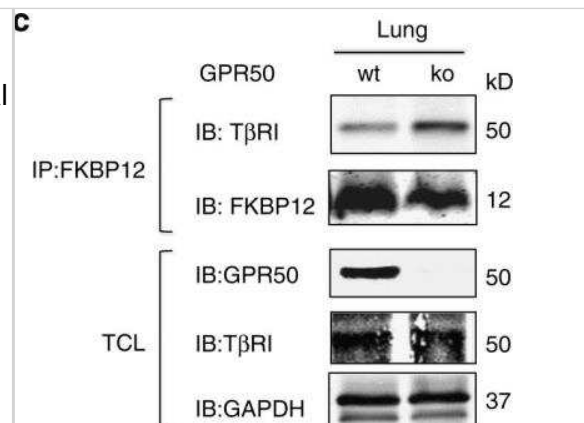
**Western Blot: GPR50 Antibody [H00009248-B01P]** - Analysis of GPR50 expression in transfected 293T cell line by GPR50 polyclonal antibody. Lane 1: GPR50 transfected lysate(67.87 KDa). Lane 2: Non-transfected lysate.



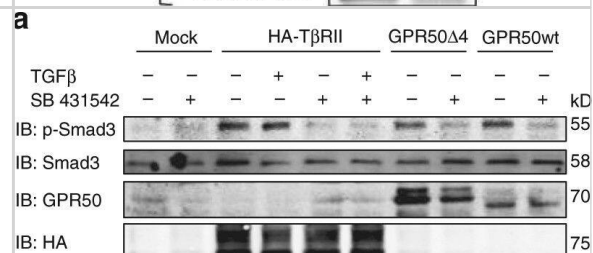
**Western Blot: GPR50 Antibody [H00009248-B01P]** - GPR50 promotes ligand-independent activation of TBRI signaling. Detection of p-Smad3, p-Stat-3, p-Jak2 (c) and p-Smad2 (d) in lysates of hypothalamus and cortex of wt and GPR50 ko mice. Image collected and cropped by CiteAb from the following publication ([nature.com/articles/s41467-018-03609-x](https://www.nature.com/articles/s41467-018-03609-x)), licensed under a CC-BY license.



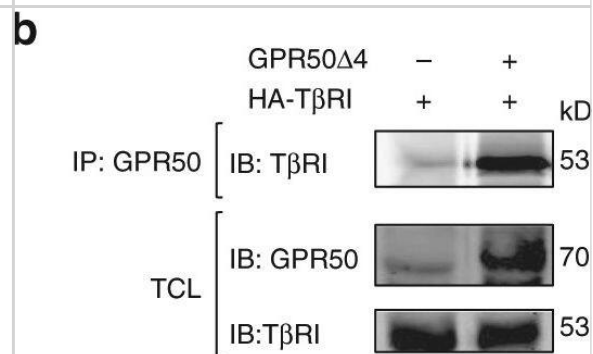
Western Blot: GPR50 Antibody [H00009248-B01P] - GPR50 competes with FKBP12 for the binding to TBRI. Competition between FKBP12 and GPR50 for TBRI binding was checked by precipitating FKBP12 from total brain and lung lysates of wt and GPR50ko mice and revealed with anti-TBRI. Total lysate was addressed for expression of FKBP12, TBRI, and GPR50 with corresponding antibodies. Image collected and cropped by CiteAb from the following publication ([nature.com/articles/s41467-018-03609-x](https://www.nature.com/articles/s41467-018-03609-x)), licensed under a CC-BY license.



Western Blot: GPR50 Antibody [H00009248-B01P] - GPR50 phosphorylate & activate TβRI independently of TβRII. a SNU638 cells were transfected with the indicated plasmids, stimulated for 1 h with TGFβ (2 ng/mL) & pretreated or not overnight with SB431542 at 10 μM. p-Smad3 & total Smad3 levels & expression of transfected plasmids were determined by western blot in cell lysates. b Co-immunoprecipitation of GRP50 & TβRI in lysates of SNU638 cells expressing HA-TβRI alone or together with GPR50Δ4. Total lysates were used as expression control (c) SNU638 cells were transfected with the indicated plasmids, stimulated TGFβ (2 ng/mL, 1 h). Total TβRI was immunoprecipitated with anti-Flag antibody & immunoblotted for anti-TβRIp-S165. Below, the same blot was immunoblotted with anti-Flag to show the amount of TβRI precipitation in cell lysates. d Phospho-Smad3 & Smad2/3 levels were determined in lysates of SNU638 cells stimulated or not with TGFβ (2 ng/mL, 1 h) & expressing the indicated proteins (as verified by western blot). The myc-MT2 melatonin receptor & the myc-MT2-GPR50Cter served as negative controls. Representative results are shown for all the panels. Similar results were obtained in at least two additional experiments. See also Supplementary Fig. 4 Image collected & cropped by CiteAb from the following publication (<https://www.nature.com/articles/s41467-018-03609-x>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: GPR50 Antibody [H00009248-B01P] - GPR50 phosphorylate & activate TβRI independently of TβRII. a SNU638 cells were transfected with the indicated plasmids, stimulated for 1 h with TGFβ (2 ng/mL) & pretreated or not overnight with SB431542 at 10 μM. p-Smad3 & total Smad3 levels & expression of transfected plasmids were determined by western blot in cell lysates. b Co-immunoprecipitation of GRP50 & TβRI in lysates of SNU638 cells expressing HA-TβRI alone or together with GPR50Δ4. Total lysates were used as expression control (c) SNU638 cells were transfected with the indicated plasmids, stimulated TGFβ (2 ng/mL, 1 h). Total TβRI was immunoprecipitated with anti-Flag antibody & immunoblotted for anti-TβRIp-S165. Below, the same blot was immunoblotted with anti-Flag to show the amount of TβRI precipitation in cell lysates. d Phospho-Smad3 & Smad2/3 levels were determined in lysates of SNU638 cells stimulated or not with TGFβ (2 ng/mL, 1 h) & expressing the indicated proteins (as verified by western blot). The myc-MT2 melatonin receptor & the myc-MT2-GPR50Cter served as negative controls. Representative results are shown for all the panels. Similar results were obtained in at least two additional experiments. See also Supplementary Fig. 4 Image collected & cropped by CiteAb from the following publication (<https://www.nature.com/articles/s41467-018-03609-x>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



## Publications

Wojciech S, Ahmad R, Belaid-Choucair Z et al. The orphan GPR50 receptor promotes constitutive TGF $\beta$  receptor signaling and protects against cancer development Nat Commun 2018-03-23 [PMID: 29572483] (WB, Rat)





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General: novus@novusbio.com

### **Products Related to H00009248-B01P**

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NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP1-97019-5mg	Mouse IgG Isotype Control

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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