Technical Data Sheet

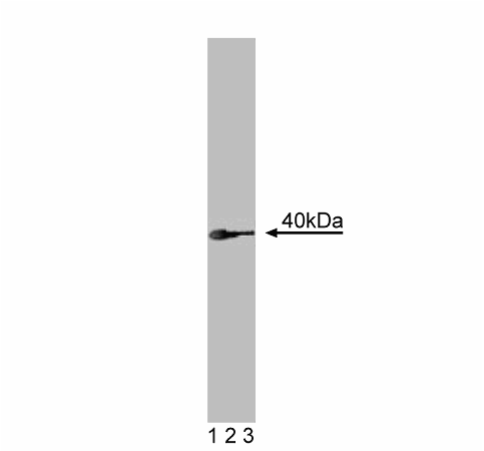
Purified Mouse Anti-RONα

Product Information

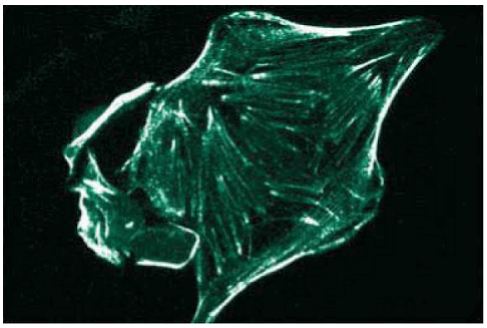
Material Number:	**610744**
Alternate Name:	Recepteur d'Origine Nantaise
Size:	50 µg
Concentration:	250 µg/ml
Clone:	29/RONα
Immunogen:	Human RONα aa. 40-224
Isotype:	Mouse IgG2b
Reactivity:	QC Testing: Dog Tested in Development: Human, Rat, Mouse, Frog
Target MW:	40 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

RON (Recepteur d'Origine Nantaise) is a tyrosine kinase receptor for MSP (Macrophage Stimulating Protein) that belongs to the hepatocyte growth factor receptor family. RON is synthesized as a single chain glycosylated polypeptide of 1400 amino acids that is cleaved upon maturation into a 150 kDa β-subunit with the kinase activity and a 40 kDa α-chain. Both chains are linked by disulfide bonds and the proper arrangement of the α and β heterodimer is necessary for biological activity of RON. MSP induces the tyrosine kinase activity of RON, triggering a cascade of intracellular signaling that leads to DNA synthesis. However, RON activation in mouse erythroleukemia cells results in apoptosis. The replacement of autophosphorylation sites Y1330 and Y1337 abolishes both the mitogenic and apoptotic effects of MSP. Therefore, autophosphorylation at Y1330 and Y1337 is required for RON's biological activity. PLCγ, Shc, Grb2, p61, and p65 associate with RON. Although widely expressed, RON is particularly abundant in epithelial tissues, lung, brain, adrenal glands, gastrointestinal tract, kidney, and testis.



Western blot analysis of RONα on a MDCK cell lysate (Canine kidney; ATCC CCL-34). *Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the mouse anti-RONα antibody.*



Immunofluorescence staining of HS 766T cells (Human pancreatic carcinoma; ATCC HTB-134).

Preparation and Storage

Store undiluted at -20°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

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Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunoprecipitation	Not Recommended
Immunohistochemistry	Not Recommended

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
611635	MDCK Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Gaudino G, Follenzi A, Naldini L. RON is a heterodimeric tyrosine kinase receptor activated by the HGF homologue MSP. *EMBO J.* 1994; 13(15):3524-3532.(Biology)

Peace BE, Hughes MJ, Degen SJ, Waltz SE. Point mutations and overexpression of Ron induce transformation, tumor formation, and metastasis. *Oncogene.* 2001; 20(43):6142-6151.(Biology: Immunoprecipitation, Western blot)

Ronsin C, Muscatelli F, Mattei MG, Breathnach R. A novel putative receptor protein tyrosine kinase of the met family. *Oncogene.* 1993; 8(5):1195-11202.(Biology)

Wang MH, Ronsin C, Gesnel MC, Coupey L. Identification of the ron gene product as the receptor for the human macrophage stimulating protein. *Science.* 1994; 266(5182):117-119.(Biology)