Mouse RECA-1 Monoclonal Antibody | anti-RECA-1 antibody

MOUSE ANTI RAT RECA-1

CATALOG #	HOST	APPLICATIONS
AAA12018	**Mouse**	**Immunohistochemistry, Immunofluorescence**

PRODUCT SYNONYMS

RECA-1; Monoclonal Antibody; MOUSE ANTI RAT RECA-1; anti-RECA-1 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Number	HIS52
Form/Format	Purified Purified IgG - liquid
Concentration	IgG concentration 0.5 mg/ml (varies by lot)
Applicable Applications for anti-RECA-1 antibody	IHC (Immunohistochemistry), IF (Immunofluorescence)
Perservative Stabilisers	0.09% Sodium Azide Preparation
Immunogen	Stromal cells from rat lymph node Fusion Partners
Target Species	Rat
Preparation and Storage	Store at 4 degree C or at -20 degree C if preferred. This product should be stored undiluted. Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use. Shelf Life: 18 months from date of despatch.

IMAGES

Application Data

Published customer image: Effect of clustered ephrin-A1-Fc on vascular formation in the rat striatum. Clustered ephrin-A1-Fc was injected into the lesioned side of the lateral ventricle in the unilaterally lesioned rats. Brains taken 6 weeks after injection were sectioned coronally and stained for GFAP (green) and RECA-1 (red) and with DAPI (nuclei; blue). The rectangular insets are shown in Fig. 8B. Scale bar: 100 um.From: Jing X, Miwa H, Sawada T, Nakanishi I, Kondo T, et al. (2012) Ephrin-A1-Mediated Dopaminergic Neurogenesis and Angiogenesis in a Rat Model of Parkinson's Disease. PLoS ONE 7(2): e32019.

Application Data

Published customer image: Transduction of AdV-eGFP/AdV-ZFP-VEGF into the spinal cord. (A) Photomicrographs showing a transverse section of rat spinal cord obtained adjacent to the injury site 10 days after spinal cord injury and AdV-eGFP injection. eGFP signal was detected in both the gray matter and white matter. (B) High-power (63X) confocal images show that the AdV-eGFP vector (green) transfected neurons (NeuN), astrocytes (GFAP), oligodendrocytes (CC1) and endothelial cells (RECA-1). Cells have been counter-stained with DAPI (blue) as nuclear marker. (C) Bar graph displays quantification of transduced cell types +/- SEM, as identified by the cell-specific markers NeuN, GFAP, RECA-1 and CC1. (D) Evaluation of AdV-ZFP-VEGF gene transfer. Western blot showed that the NF?B p65 rabbit polyclonal antibody recognizes the p65 activation domain in the AdV-ZFP-VEGF treated animals. The higher molecular weight bands are endogenous NF?Bp65 fragments, which are also recognized by the antibody; however, these bands are present in both the control and treatment groups. The lower band (arrow) corresponds to the AdV-ZFP-VEGF and was only present in the treated animals. Lower panel shows actin expression as a protein control. Scale bar: 1000 um for A; 100 um for B.From: Figley SA, Liu Y, Karadimas SK, Satkunendrarajah K, Fettes P, et al. (2014) Delayed Administration of a Bio-Engineered Zinc-Finger VEGF-A Gene Therapy Is Neuroprotective and Attenuates Allodynia Following Traumatic Spinal Cord Injury. PLoS ONE 9(5): e96137.

Application Data

Published customer image:Endothelial cell number and capillary length post radiation. (A) Representative images of sections from the corpus callosum immunostained for rat endothelial cell antigen (RECA) at various time points post radiation. RECA expression declines immediately post radiation but is restored and maintained through 15 months. Stereological estimates of the number of capillary segments in the cortex (B) and corpus callosum (C) and of capillary length in both regions (D, E). (*** p

Application Data

Published customer image: Pyruvate reduces R/M hypoglycemia-induced cortical blood vessel loss. (A) Bright field photomicrographs from coronal sections of cortex demonstrate loss of blood vessels at three days after R/M hypoglycemia by RECA-1 (rat endothelial cell antigen 1) staining. Panels show the progression of blood vessel changes in the parietal (PT Ctx) and perirhinal (PRh Ctx) cortex. After R/M hypoglycemia, blood vessels showed decreased density compared to sham-operated rats. Intraperitoneal injection of pyruvate as an adjuvant to glucose at ten minutes after R/M hypoglycemia reduced blood vessel disappearance. Scale bar = 100 um. (B) Graph represents the % area of RECA-1 immunoreactivity in the parietal and perirhinal cortex. Data are means +/- s.e.m., n=5-6 from each group, *P

Application Data

Published customer image: AdV-ZFP-VEGF results in increased vessel counts and angiogenesis. (A) Left panel: Illustration of the area of spinal cord areas used for RECA-1 counting (2 grey matter areas, 2 white matter areas). (B) Representative sections taken 2 mm rostral to the epicenter from a AdV-ZFP-VEGF treated and AdV-eGFP control animal respectively immunostained with RECA-1 at 10 days after SCI; scale 100 um. An increased number of vessels were observed in the AdV-ZFP-VEGF treated group. (C) Bar graph illustrating the RECA-1 positive cell counts 10 days after SCI. AdV-ZFP-VEGF administration resulted in a significant increase in vascular counts (2 mm and 4 mm away from the epicenter) as compared with the control group. (D) Representative confocal image from an ADV-ZFP-VEGF treated animal at 5 days post-injury. Image was taken at 2 mm rostral from the epicenter, and shows double-labeled cells. Cells were stained for endothelial cells (RECA-1, green) and proliferation (Ki67, red). Scale bar = 50 um (30 um for magnified panel). (E) Angiogenesis was assessed by quantifying Ki67/RECA-1 co-labeled vessels. Data is presented at the percentage of RECA-1+ vessels that were also Ki67+, with an overall average increase of 10% vascular proliferation observed in the animals receiving AdV-ZFP-VEGF administration. All data are presented as mean +/- SEM, and was analyzed by Two-way ANOVA (Holm-Sidak post-hoc). Angiogenesis data were analyzed by performing an arcsine transformation of the values, prior to Two-way ANOVA and post-hoc testing. *p

Application Data

Published customer image:Representative patterns of RECA-1 staining in rat hippocampus. (a) Microvessels in control (PBS) injected rat hippocampus (left panel) and microvessels in Abeta1-42-injected hippocampus (right panel). Scale bar is for 70um. (b) Bar graph for the number of microvessels/mm2 (n = 5 each). (c) Bar graph for microvessel length (n = 5 each). *P = 0.05 for Abeta1-42 versus PBS.From: Jantaratnotai N, Ryu JK, Schwab C, McGeer PL, McLarnon JG. Comparison of Vascular Perturbations in an Abeta-Injected Animal Model and in AD Brain. Int J Alzheimers Dis. 2011;2011:918280.

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