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Antibody to OX7 (anti-Thy 1.1)
MOUSE MONOCLONAL

Catalog Number: AB-N08
Quantity: 100 micrograms
Format: PBS (0.14 M Sodium Chloride; 0.003 M Potassium Chloride; 0.002 M Potassium Phosphate; 0.01 M Sodium Phosphate; pH 7.4), no preservative. Sterile-filtered.
Host: Mouse
Isotype: IgG₁
Clone: OX7
Immunogen: rat Thy 1.1 (CD90)

Background:

OX7, also known as Thy-1, Thy 1.1 or CD90, is expressed on a variety of cell types including thymocytes, neuronal cells, stem cells, T lymphocytes (mouse), immature B cells (rat) and connective tissues. It is involved in regulation of adhesion and signal transduction by T cells. It may contribute to inhibition of proliferation differentiation of hematopoietic stem cells and neuron memory formation in the CNS.

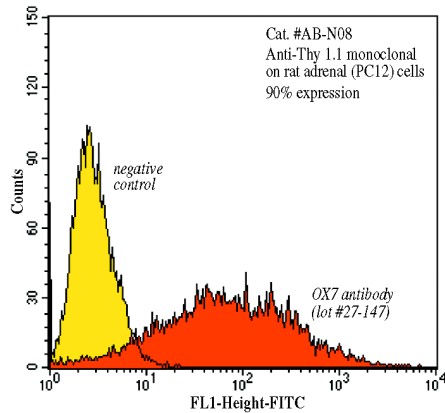
Specificity and Preparation:

This antibody recognizes cells that express Thy-1.1 in rat, mouse, rabbit or guinea pig. Note: Antibody reactivity and working conditions may vary between species. Anti-OX7 was created as a mouse monoclonal generated to rat Thy-1.1 (CD90). The antibody is routinely tested by flow cytometry.

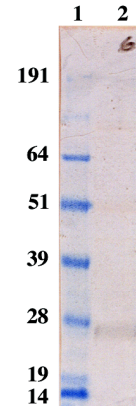
Usage and Storage:

Applications include immunohistochemistry (frozen; 1:2),^{2,3} flow cytometry (ATS in-house; 1:100),⁴ radioimmunoassay (1:10),⁵ and immunoblotting (ATS in-house; 1:200). Causes glomerulosclerosis when injected intravenously.¹ Store the antibody at -20°C for one year. Avoid repeated freezing and thawing. Gently spin down material before use; 5-10 seconds in a microfuge should be adequate.

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PC12 cells, rat adrenal pheochromocytoma cells, were used in flow cytometry with the OX7 antibody that reacts with the rat Thy 1.1 (CD90). Cells were treated with anti-OX7 (lot# 27-147) at a 1:100 dilution and subsequently with anti-murine IgG-FITC. A 90% shift is seen as compared to the non-treated control.



Lane 1: Molecular weight standards (Invitrogen SeeBlue)

Lane 2: Rat brain membrane extract probed with OX7 (anti-Thy 1.1) antibody (Cat. #AB-N08) at a 1:200 dilution.

References:

1. Narita I, Nakayama H, Goto S, Takeda T, Sakatsume M, Saito A, Nakagawa Y, Arakawa M. (1997) Identification of genes specifically expressed in chronic and progressive glomerulosclerosis. *Kidney Int Suppl* 63:S215-217.
2. Baker-Cairns BJ, Sloan DJ, Broadwell RD, Puklavec M, Charlton HM. (1996) Contributions of donor and host blood vessels in CNS allografts. *Exp Neurol* 142(1):36-46.
3. Fukuda K, Yanagida T, Okuda S, Tamaki K, Ando T, Fujishima J. (1996) Role of endothelin as a mitogen in experimental glomerulonephritis in rats. *Kidney Int* 49(5):1320-1329.
4. Stefanski V, Solomon GF, Kling AS, Thomas J, Plaeger S. (1996) Impact of social confrontation on rat CD4 T cells bearing different CD45R isoforms. *Brain Behav Immun* 10(4):364-379.
5. Weber RJ, Hill JM, Pert CB. (1988) Regional distribution and density of Thy 1.1 in rat brain and its relation to subpopulations of neurons. *J Neuroimmunol* 17(2):137-145.