

Datasheet for ABIN967395

anti-NR4A1 antibody**2** Images**5** Publications[Go to Product page](#)

Overview

Quantity:	0.1 mg
Target:	NR4A1
Reactivity:	Mouse
Host:	Mouse
Clonality:	Monoclonal
Application:	Western Blotting (WB)

Product Details

Brand:	BD Pharmingen™
Immunogen:	Full-length mouse Nur77 fusion protein
Clone:	12-14
Isotype:	IgG1
Characteristics:	<ol style="list-style-type: none">1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.2. Please refer to us 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.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	NR4A1
Alternative Name:	Nur77 (NR4A1 Products)
Background:	<p>Nur77 (also known as NGF1-B, N10, TISI) is a growth factor-inducible orphan member of the steroid/thyroid hormone receptor superfamily. This superfamily encodes ligand-dependent transcription factors with a centrally located, highly conserved DNA-binding domain containing two zinc-fingers. Although Nur77 binds no known ligand, it is constitutively active when synthesized. Nur77 was originally identified as an immediate-early gene rapidly activated by serum stimulation of quiescent fibroblasts. It has since been shown to be activated by diverse signals including membrane depolarization, nerve growth factor, chemically induced seizures, adrenocorticotrophic hormone (ACTH), pentylene tetrazole, forskolin and cAMP. Nur77, like other immediate-early genes such as c-myc, has also been shown to have a role in apoptosis. Apoptosis is an internal, programmed cell death which takes place during normal development. Nur77 has been demonstrated to be required for in vitro T-cell-receptor (TCR) mediated negative selection. Negative selection, or the clonal deletion of thymocytes, normally occurs by apoptosis following engagement of the TCR. Nur77 is present in high levels in T-cell hybrids and thymocytes undergoing apoptosis, but not in growing T cells or stimulated splenocytes. T-cell hybrids are protected from activation-induced apoptosis by a Nur77 dominant negative mutation. Induction of Nur77 mRNA and cell death by apoptosis following treatment of T-cell hybrids with antibody directed against the TCR has also been shown. Additionally, transfection of the T-cell hybrids with antisense Nur77 protects cells from apoptosis when signaled to die by TCR engagement. Nur77 is a phosphoprotein which migrates on SDS/PAGE gels as diffuse bands between 67 and 88 kDa depending on post-translational modifications. Clone 12.14 recognizes mouse Nur77. A full-length mouse Nur77 fusion protein was used as immunogen.</p> <p>Synonyms: NGF1-B, N10, TISI</p>

Molecular Weight:	67-88 kDa
Pathways:	Fc-epsilon Receptor Signaling Pathway , Nuclear Receptor Transcription Pathway , EGFR Signaling Pathway , Neurotrophin Signaling Pathway , Steroid Hormone Mediated Signaling Pathway

Application Details

Application Notes:	Mouse thymocytes treated with PMA and ionomycin are suggested as a positive control.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.5 mg/mL
Buffer:	Aqueous buffered solution containing ≤ 0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Store undiluted at 4°C.

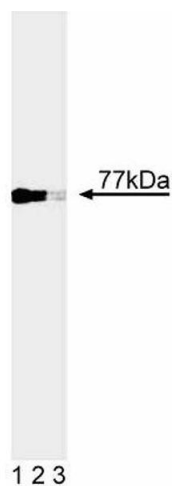
Publications

- Product cited in:
- Golledge, Biro, Clancy, Cooper, Palmer, Norman: "A single-nucleotide polymorphism in the gene encoding osteoprotegerin is associated with diastolic blood pressure in older men." in: **American journal of hypertension**, Vol. 22, Issue 11, pp. 1167-70, (2009) ([PubMed](#)).
- Talmud, Drenos, Shah, Shah, Palmen, Verzilli, Gaunt, Pallas, Lovering, Li, Casas, Sofat, Kumari, Rodriguez, Johnson, Newhouse, Dominiczak, Samani, Caulfield, Sever, Stanton, Shields, Padmanabhan et al.: "Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. ..." in: **American journal of human genetics**, Vol. 85, Issue 5, pp. 628-42, (2009) ([PubMed](#)).

Images

Image 1.





Western Blotting

Image 2. Western blot analysis of Nur77. Mouse thymocytes were stimulated with PMA (20 ng/ml) and ionomycin (500 ng/ml at 37°C for 2 hr). Lysates were prepared and separated by SDS/PAGE. Blots were probed with anti-Nur77 (clone 12.14, ABIN967395) at concentrations of 2.0 (lane 1), 1.0 (lane 2), and 0.5 µg/ml (lane 3). Nur77 is detected as a protein of ~77 kDa.