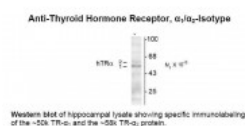




Thyroid Hormone Receptor Antibody [1718]

CATALOG NUMBER: 50-171



Western blot of hippocampal lysate showing specific immunolabeling of the ~50k TR-alpha1 and the ~58k TR-alpha2 protein.

Specifications

SPECIES REACTIVITY:	Dog, Human, Mouse, Rat
TESTED APPLICATIONS:	WB
APPLICATIONS:	The antibody has been directly tested for reactivity in Western blots with human tissue. It is anticipated that the antibody will react with canine, mouse and rat based on the fact that these species have 100% homology with the amino acid sequence used as antigen.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
PREDICTED MOLECULAR WEIGHT:	50/58
IMMUNOGEN:	Peptide corresponding to amino acid residues from the N-terminal region of human thyroid hormone receptor, alpha1/alpha2-isotype.
HOST SPECIES:	Mouse

Properties

PURIFICATION:	Protein G purified
PHYSICAL STATE:	Liquid
BUFFER:	100 uL in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 ug per mL BSA and 50% glycerol.
STORAGE CONDITIONS:	Thyroid Hormone Receptor antibody can be stored at -20°C and is stable at -20°C for at least 1 year.
CLONALITY:	Monoclonal
ISOTYPE:	IgG2A
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	AR7, EAR7, ERBA, CHNG6, ERBA1, NR1A1, THRA1, THRA2, ERB-T-1, c-ERBA-1, Nuclear receptor subfamily 1 group A member 1, EAR-7
ACCESSION NO.:	P10827
PROTEIN GI NO.:	135705

OFFICIAL SYMBOL:	THRA
GENE ID:	7067

Background

BACKGROUND: Thyroid hormones are essential for development of the central nervous system and deficits in these hormones during development affects such cognitive functions as learning and memory (Ambrogini et al., 2005; Chan and Kilby, 2000). Thyroid hormones exert their physiological role mainly through binding to specific nuclear receptors including the predominant isoforms of thyroid hormone receptors TRalpha1, TRalpha2, TRbeta1 and TRbeta2. TRalpha1, TRbeta1 and TRbeta2 bind T3 with high affinity and also bind to thyroid hormone response elements (TREs) on chromatin to regulate the transcriptional processes in several target tissues, including adult rat brain (Constantinou et al., 2005).

REFERENCES:

- 1) Ambrogini P, Cuppini R, Ferri P, Mancini C, Ciaroni S, Voci A, Gerdoni E, Gallo G (2005) Thyroid hormones affect neurogenesis in the dentate gyrus of adult rat. *Neuroendocrinology* 81:244-253.
- 2) Chan S, Kilby MD (2000) Thyroid hormone and central nervous system development. *J Endocrinol* 165:1-8.
- 3) Constantinou C, Margarity M, Valcana T (2005) Region-specific effects of hypothyroidism on the relative expression of thyroid hormone receptors in adult rat brain. *Mol Cell Biochem* 278:93-100.

FOR RESEARCH USE ONLY

December 13, 2016