

ROR γ (h): 293T Lysate: sc-114336

BACKGROUND

The nuclear orphan receptors ROR α and ROR γ are members of the nuclear hormone receptor superfamily. This family acts by directly associating with DNA sequences known as hormone response elements (HREs) and typically bind DNA as either homo- or heterodimers. ROR α and ROR γ are unique in that they bind DNA as monomers. ROR α has multiple isoforms that share common DNA and putative ligand-binding domains, but differ in their amino-terminal domains, which are generated by alternative RNA processing. ROR γ comprises a 560 amino acid protein that shares 50% amino acid identity with ROR α and is most highly expressed in skeletal muscle. Although these proteins are considered "orphan receptors" due to a lack of defined ligands, experimental evidence has shown that melatonin may be the natural ligand for these nuclear receptors.

REFERENCES

1. Giguere, V., et al. 1994. Isoform-specific amino-terminal domains dictate DNA-binding properties of ROR α , a novel family of orphan hormone nuclear receptors. *Genes Dev.* 8: 538-543.
2. Hirose, T., et al. 1994. ROR γ : the third member of ROR/RZR orphan receptor subfamily that is highly expressed in skeletal muscle. *Biochem. Biophys. Res. Commun.* 205: 1976-1983.
3. Carlberg, C., et al. 1995. The orphan receptor family RZR/ROR, melatonin and 5-lipoxygenase: an unexpected relationship. *J. Pineal Res.* 18: 171-178.
4. Mangelsdorf, D.J., et al. 1995. The nuclear receptor superfamily: the second decade. *Cell* 83: 835-839.
5. Leblanc, B.P., et al. 1995. 9-*cis* retinoic acid signaling: changing partners causes some excitement. *Genes Dev.* 9: 1811-1816.
6. Mangelsdorf, D.J., et al. 1995. The RXR heterodimers and orphan receptors. *Cell* 83: 841-850.
7. Gawlas, K., et al. 2000. Differential binding and transcriptional behaviour of two highly related orphan receptors, ROR α_4 and ROR β_1 . *Biochim. Biophys. Acta* 1494: 236-241.
8. LocusLink Report (LocusID: 6095). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: RORC (human) mapping to 1q21.3.

PRODUCT

ROR γ (h): 293T Lysate represents a lysate of human ROR γ transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

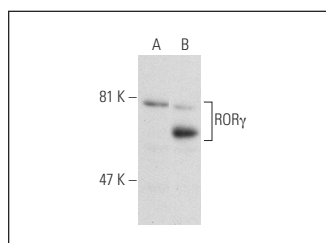
APPLICATIONS

ROR γ (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive ROR γ antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

ROR γ (162C2a): sc-81371 is recommended as a positive control antibody for Western Blot analysis of enhanced human ROR γ expression in ROR γ transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



ROR γ (162C2a): sc-81371. Western blot analysis of ROR γ expression in non-transfected: sc-117752 (A) and human ROR γ transfected: sc-114336 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.