**Rev-erbβ (D-8): sc-398252**

**BACKGROUND**

Orphan nuclear receptors NR1D1 and NR1D2 are more commonly designated Rev-erxa and Rev-erbβ, respectively. Rev-erxa acts as a receptor for triiodothyronine and is composed of three domains: a modulating N-terminal domain, a C-terminal steroid binding domain and a DNA-binding domain. Rev-erbβ binds to the sequences 5'-AATGAGGCTA-3' and 5'-ATAACTACTGCA-3' and acts as a competitive repressor of RORα function. It interacts with NCOA5 co-activator which leads to an increase in transcription. Both Rev-erxa and Rev-erbβ are nuclear proteins belonging to the nuclear hormone receptor family of proteins.

**CHROMOSOMAL LOCATION**

Genetic locus: NR1D2 (human) mapping to 3p24.2; Nr1d2 (mouse) mapping to 14A2.

**SOURCE**

Rev-erbβ (D-8) is a mouse monoclonal antibody raised against amino acids 195-267 mapping within an internal region of Rev-erbβ of mouse origin.

**PRODUCT**

Each vial contains 200 μg IgG1 kappa light chain in 1.0 ml of PBS < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-398252 X, 200 μg/0.1 ml.

Rev-erbβ (D-8) is available conjugated to agarose (sc-398252 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398252 HRP), 200 μg/ml, for WB, HICP and ELISA; to either phycoerythrin (sc-398252 PE), fluorescein (sc-398252 FITC), Alexa Fluor® 488 (sc-398252 AF488), Alexa Fluor® 546 (sc-398252 AF546), Alexa Fluor® 594 (sc-398252 AF594) or Alexa Fluor® 647 (sc-398252 AF647), 200 μg/ml, for WB (RGB), IF, HICP and FCM; and to either Alexa Fluor® 680 (sc-398252 AF680) or Alexa Fluor® 790 (sc-398252 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

Rev-erbβ (D-8) is recommended for detection of Rev-erbβ of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Rev-erbβ (D-8) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Rev-erbβ: 70 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, MDA-MB-231 cell lysate: sc-2232 or EOC 20 whole cell lysate: sc-364187.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG BP-HRP: sc-516102 or m-IgG BP-HRP (Cruz Marker); sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker TM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGx BP-FITC: sc-516140 or m-IgGx BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

Data: Western blot analysis of Rev-erbβ expression in HeLa nuclear extract (A) and EOC 20 whole cell lysate (B).

**SELECT PRODUCT CITATIONS**


**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

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

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.