

COASTER (A-6): sc-393360

BACKGROUND

COASTER (coactivator for steroid receptors), also known as ZNF451 (zinc finger protein 451), is a 1,061 amino acid nuclear protein that belongs to the Krüppel C₂H₂-type zinc-finger protein family and acts as a coactivator for steroid receptors. Thought to play a role in transcriptional regulation, COASTER contains 11 C₂H₂-type zinc fingers and exists as 3 alternatively spliced isoforms. The gene encoding COASTER maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

1. Brunner, H.G., et al. 1994. A Stickler syndrome gene is linked to chromosome 6 near the COL11A2 gene. *Hum. Mol. Genet.* 3: 1561-1564.
2. Cesari, R., et al. 2003. Parkin, a gene implicated in autosomal recessive juvenile parkinsonism, is a candidate tumor suppressor gene on chromosome 6q25-q27. *Proc. Natl. Acad. Sci. USA* 100: 5956-5961.
3. Vuoristo, M.M., et al. 2004. A stop codon mutation in COL11A2 induces exon skipping and leads to non-ocular Stickler syndrome. *Am. J. Med. Genet. A* 130A: 160-164.
4. Park, E., et al. 2007. Modulation of Parkin gene expression in noradrenergic neuronal cells. *Int. J. Dev. Neurosci.* 25: 491-497.

CHROMOSOMAL LOCATION

Genetic locus: ZNF451 (human) mapping to 6p12.1; Zfp451 (mouse) mapping to 1 B.

SOURCE

COASTER (A-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 983-1010 near the C-terminus of COASTER of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

COASTER (A-6) is available conjugated to agarose (sc-393360 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393360 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393360 PE), fluorescein (sc-393360 FITC), Alexa Fluor® 488 (sc-393360 AF488), Alexa Fluor® 546 (sc-393360 AF546), Alexa Fluor® 594 (sc-393360 AF594) or Alexa Fluor® 647 (sc-393360 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393360 AF680) or Alexa Fluor® 790 (sc-393360 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393360 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

COASTER (A-6) is recommended for detection of COASTER 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).

Suitable for use as control antibody for COASTER siRNA (h): sc-95474, COASTER siRNA (m): sc-142447, COASTER shRNA Plasmid (h): sc-95474-SH, COASTER shRNA Plasmid (m): sc-142447-SH, COASTER shRNA (h) Lentiviral Particles: sc-95474-V and COASTER shRNA (m) Lentiviral Particles: sc-142447-V.

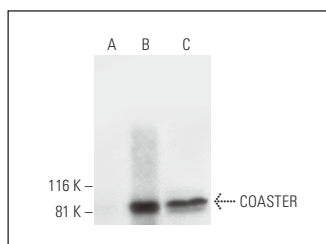
Molecular Weight of COASTER: 121 kDa.

Positive Controls: COASTER (m2): 293T Lysate: sc-119351 or MCF7 whole cell lysate: sc-2206.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



COASTER (A-6): sc-393360. Western blot analysis of COASTER expression in non-transfected 293T: sc-117752 (A), mouse COASTER transfected 293T: sc-119351 (B) and MCF7 (C) whole cell lysates.

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.

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