DMRT1 (A-9): sc-377167

**BACKGROUND**

DMRT1 (doublesex- and mab-3-related transcription factor 1), also known as DMT1 or DM domain expressed in testis protein 1, is a 373 amino acid protein that contains a highly conserved zinc-finger-like DNA-binding motif (DM domain). The DMRT genes encode a large family of transcription factors that participate in the sexual development of vertebrates and invertebrates. In humans, DMRT1 is expressed only in testis and is transported to the nucleus by karyopherin β1. DMRT1 is required for testis development and may be involved in the formation of the seminiferous tubules. The gene encoding DMRT1 exhibits a gonad-specific and sexually dimorphic expression pattern during embryogenesis in mammals and birds. The gene encoding DMRT1 is expressed in normal testicular development and XY feminization. DMRT1 is expressed at four isoforms due to alternative splicing.

**CHROMOSOMAL LOCATION**

Genetic locus: DMRT1 (human) mapping to 9p24.3; Dmrt1 (mouse) mapping to 19 B.

**SOURCE**

DMRT1 (A-9) is a mouse monoclonal antibody raised against amino acids 134-373 mapping at the C-terminus of DMRT1 of human origin.

**PRODUCT**

Each vial contains 200 μg IgG, kappa light chain in 1 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

DMRT1 (A-9) is available conjugated to agarose (sc-377167 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377167 HRP), 200 μg/ml, for WB, (H)CIP and ELISA; to either phosphorytin (sc-377167 PE), fluorescein (sc-377167 FITC), Alexa Fluor® 488 (sc-377167 AF488), Alexa Fluor® 546 (sc-377167 AF546), Alexa Fluor® 594 (sc-377167 AF594) or Alexa Fluor® 647 (sc-377167 AF647), 200 μg/ml, for WB (RGB), IF, (H)CIP and FCM; and to either Alexa Fluor® 680 (sc-377167 AF680) or Alexa Fluor® 790 (sc-377167 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

DMRT1 (A-9) is recommended for detection of DMRT1 of mouse, rat and human origin by Western Blotting (starting dilution 1:1000, 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), immunohistochemistry (including paraffin-embedded sections) (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 DMRT1 siRNA (h): sc-92489, DMRT1 siRNA (m): sc-143060, DMRT1 shRNA Plasmid (h): sc-92489-SH, DMRT1 shRNA Plasmid (m): sc-143060-SH, DMRT1 shRNA (h) Lentiviral Particles: sc-92489-V and DMRT1 shRNA (m) Lentiviral Particles: sc-143060-V.

Molecular Weight of DMRT1: 39 kDa.

Positive Controls: U-2 OS cell lysate: sc-2295 or HL-60 whole cell lysate: sc-2209.

**STORAGE**

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

**DATA**

**RESEARCH USE**

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