Parafibromin (2H1): sc-33638

BACKGROUND
Parathyroid tumors are heterogeneous and diagnosis of the disease is often difficult. The Parafibromin protein may be important as a marker for diagnosing parathyroid carcinoma. Parafibromin is encoded by the endocrine tumor suppressor gene CDC73 (cell division cycle 73, Pafl/RNA polymerase II complex component), alternatively known as the HRPT2 (hyperparathyroidism-jaw tumor syndrome 2) gene. The human CDC73 gene, which maps to chromosome 1q31.2, is the human homolog of Saccharomyces cerevisiae Cdc73 and is responsible for the hyperparathyroidism with jaw tumor syndrome (HPT-JT). Parafibromin is part of the RNA polymerase II/Paf1 complex, which is crucial for histone modification. This Parafibromin complex binds to both the nonphosphorylated forms and the Ser 2 and Ser 5 phosphorylated forms of the RNA polymerase II large subunit.

CHROMOSOMAL LOCATION
Genetic locus: CDC73 (human) mapping to 1q31.2; Cdc73 (mouse) mapping to 1 F.

SOURCE
Parafibromin (2H1) is a mouse monoclonal antibody raised against a peptide corresponding to amino acids 87-100 of Parafibromin of mouse origin.

PRODUCT
Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.
Parafibromin (2H1) is available conjugated to agarose (sc-33638 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-33638 HRP), 200 µg/ml, for WB, HICC (and ELISA) to either phycoerythrin (sc-33638 PE), fluorescein (sc-33638 FITC), Alexa Fluor® 488 (sc-33638 AF488), Alexa Fluor® 546 (sc-33638 AF546), Alexa Fluor® 594 (sc-33638 AF594) or Alexa Fluor® 647 (sc-33638 AF647), 200 µg/ml, for WB (RGB), IF, IHC (P) and FCM; and to either Alexa Fluor® 680 (sc-33638 AF680) or Alexa Fluor® 790 (sc-33638 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS
Parafibromin (2H1) is recommended for detection of Parafibromin 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).
Molecular Weight of Parafibromin: 60 kDa.
Positive Controls: Parafibromin (m): 293T Lysate: sc-122375, C32 whole cell lysate: sc-2205 or HeLa whole cell lysate: sc-2200.

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

DATA
Parafibromin (2H1): sc-33638. Western blot analysis of Parafibromin expression in non-transfected 293T: sc-117752 (A), mouse Parafibromin transfected 293T: sc-122375 (B) and C32 (C) whole cell lysates.

SELECT PRODUCT CITATIONS

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