BACKGROUND
The finding that mutations in DNA mismatch repair genes are associated with hereditary nonpolyposis colorectal cancer (HNPCC) has resulted in considerable interest in the understanding of the mechanism of DNA mismatch repair. Initially, inherited mutations in the MSH2 and MLH1 homologs of the bacterial DNA mismatch repair genes MutS and MutL were demonstrated at high frequency in HNPCC and were shown to be associated with microsatellite instability. The demonstration that 10 to 45% of pancreatic, gastric, breast, ovarian and small cell lung cancers also display microsatellite instability has been interpreted to suggest that DNA mismatch repair is not restricted to HNPCC tumors but is a common feature in tumor initiation or progression. Two additional homologs of the prokaryotic MutL gene, designated PMS1 and PMS2, have been identified and shown to be mutated in the germline of HNPCC patients.

CHROMOSOMAL LOCATION
Genetic locus: PMS2 (human) mapping to 7p22.1; Pms2 (mouse) mapping to 5 G2.

SOURCE
PMS2 (C-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of PMS2 of human origin.

PRODUCT
Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-618P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS
PMS2 (C-20) is recommended for detection of PMS2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

PMS2 (C-20) is also recommended for detection of PMS2 in additional species, including equine, canine, bovine and porcine.

Molecular Weight of PMS2: 110 kDa.

Positve Controls: HeLa nuclear extract: sc-2120, Jurkat nuclear extract: sc-2132 or A-431 nuclear extract: sc-2122.

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

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

DATA

SELECT PRODUCT CITATIONS

Try PMS2 (B-3): sc-25315, our highly recommended monoclonal alternative to PMS2 (C-20).