#### PRODUCT DATA SHEET



# Bioworld Technology CO., Ltd.

# MRE11 (L260) Peptide

Cat No.: BS1852P

# **Background**

DNA double-strand breaks are generated by ionizing radiation and endogenously produced radicals, and they often are repaired through the RAD52 homologous recombination pathway. The RAD52 family includes RAD51, RAD52, RAD54, RAD54B and MRE11 genes. Rad51 and Rad52 proteins perform the key steps in homologous recombination (HR), including the search for DNA homology and strand exchange, through similar mechanisms. Mre11 functions in both non-homologous end joining, and meiotic HR, and it is essential in mitosis for chromosome maintenance. Rad54 belongs to the SWI2/SNF2 subfamily of ATPases, which includes the DNA helicases involved in replication, recombination, and repair, as it contains seven amino acid sequence motifs that are largely conserved. Rad54 ATPase activity is dependent on double-stranded (ds) DNA, and the ATPase activity of Rad54 is not absolutely required for its DNA repair function, suggesting that these activities occur at distinct regions of the molecule. RAD54B is significantly homologous to the RAD54 recombination gene. Expression of RAD54B is highest in testis and spleen, which are active in both meiotic and mitotic recombination..

# **Swiss-Prot**

P49959

#### **Applications**

Blocking

#### **Specificity**

This peptide can be used with studies using BS1852 MRE11 (L260) pAb.

#### **Purification & Purity**

Synthetic peptide MRE11 (L260). (Note: the amino acid sequence is proprietary). The purity is > 98%.

#### **Product**

1 mg/ml in DI water.

# **Storage & Stability**

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at  $-20\,\mathrm{C}$  long term. Avoid freeze-thaw cycles.

#### **Research Use**

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

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