

Product datasheet

Recombinant Human Mre11 protein ab114277

1 Image

Description

<b>Product name</b>	Recombinant Human Mre11 protein
<b>Expression system</b>	Wheat germ
<b>Accession</b>	<a href="#">Q9BS79</a>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Sequence</b>	MSTADALDDENTFKILVATDIHLGFMEKDAVRGNDTFVTL DEILRLAQEN EVDIFLLGGDLFHENKPSRKTLLHTCLELLRKYCMGDRPVQ FEILSDQSVN FGFSKFPWVNYQDGNLNISIPVFSIHGNHDDPTGADALCA LDILSCAGFV NHFGRSMSVEKIDISPVLLQKGRTKIALYGLGSIPDERLYRM FVNKKVTM LRPKED
<b>Predicted molecular weight</b>	49 kDa including tags
<b>Amino acids</b>	1 to 206

Specifications

Our [Abpromise guarantee](#) covers the use of **ab114277** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	ELISA SDS-PAGE Western blot
<b>Form</b>	Liquid

Preparation and Storage

<b>Stability and Storage</b>	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00
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## General Info

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### Function

Component of the MRN complex, which plays a central role in double-strand break (DSB) repair, DNA recombination, maintenance of telomere integrity and meiosis. The complex possesses single-strand endonuclease activity and double-strand-specific 3'-5' exonuclease activity, which are provided by MRE11A. RAD50 may be required to bind DNA ends and hold them in close proximity. This could facilitate searches for short or long regions of sequence homology in the recombining DNA templates, and may also stimulate the activity of DNA ligases and/or restrict the nuclease activity of MRE11A to prevent nucleolytic degradation past a given point. The complex may also be required for DNA damage signaling via activation of the ATM kinase. In telomeres the MRN complex may modulate t-loop formation.

### Involvement in disease

Defects in MRE11A are a cause of ataxia telangiectasia-like disorder (ATLD) [MIM:604391]. ATLD is a disease with the same clinical feature than ataxia-telangiectasia but with a somewhat milder clinical course.

### Sequence similarities

Belongs to the MRE11/RAD32 family.

### Post-translational modifications

Phosphorylated upon DNA damage, probably by ATM or ATR.

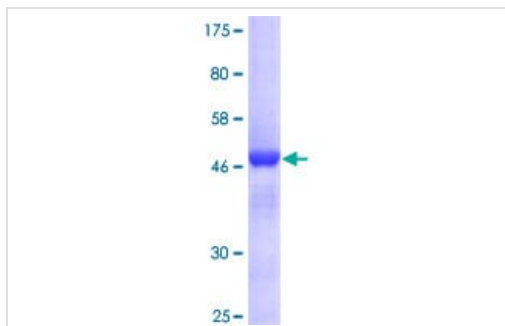
### Cellular localization

Nucleus. Localizes to discrete nuclear foci after treatment with genotoxic agents.

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## Images

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12.5% SDS-PAGE analysis of Mre11 protein (ab114277). Stained with Coomassie Blue.

SDS-PAGE - Recombinant Human Mre11 protein  
(ab114277)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## Our Abpromise to you: Quality guaranteed and expert technical support

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- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you

- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

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