

# **XRCC3** Antibody

Mouse Monoclonal Antibody [Clone 10F1/6]

Catalog No	Format	Size
7517-MSM1-P0	Purified Ab with BSA and Azide	200ug/ml
7517-MSM1-P1	Purified Ab with BSA and Azide	200ug/ml
7517-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

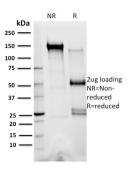
Applications	Tested Dillution
Immunohistochemistry (IHC)	1-2ug/ml
Western Blot (WB)	2-4ug/ml

#### **Product Details**

Clone	10F1/6	
Gene Name	XRCC3	
Immunogen	Recombinant full-length human XRCC3 protein	
Host	Mouse	
Clonality	Monoclonal	
Isotype / Light Chain	IgG1 / Kappa	
Mol. Weight of Antigen	40kDa	
Cellular Localization	Cytoplasm, Mitochondrion, Nucleus, Perinuclear region	
Species Reactivity	Human	
Positive Control	Human placenta. HeLa nuclear extract.	
*Ontimal dilution for a specific application	n should be determined	

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# **Product Images for XRCC3 Antibody**



SDS-PAGE Analysis of Purified XRCC3 Mouse Monoclonal Antibody (10F1/6). Confirmation of Integrity and Purity of Antibody.



# **Specificity & Comments**

The x-ray repair cross-complementing (XRCC) proteins are responsible for efficiently repairing and maintaining genetic stability following DNA base damage. These genes share sequence similarity with the yeast DNA repair protein Rad51. XRCC1 is a protein that facilitates the DNA base excision repair pathway by interacting with DNA ligase III and DNA polymerase to repair DNA single-strand breaks. XRCC2 and XRCC3 are both involved in maintaining chromosome stability during cell division. XRCC2 is required for efficient repair of DNA double-strand breaks by homologous recombination between sister chromatids, and XRCC3 interacts directly with Rad51 to cooperate with Rad51 during recombinational repair. XRCC4 is an accessory factor of DNA Ligase IV that preferentially binds DNA with nicks or broken ends. XRCC4 binds to DNA Ligase IV and enhances its joining activity, and it is also involved in V(D)J recombination. Any defect in one of the known components of the DNA repair/V(D)J recombination machinery (Ku-70, Ku-80, DNA-PKCS, XRCC4 and DNA Ligase IV) leads to abortion of the V(D)J rearrangement process and early block in both T and B cell maturation.

#### **Research Areas**

Cardiovascular, Nuclear Marker

# Known Applications & Suggested Dilutions

Western Blot (1-2ug/ml) | Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 min at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95&degC followed by cooling at RT for 20 minutes) | Optimal dilution for a specific application should be determined.

# Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.

There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

#### **Supplied As**

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

# **Storage and Stability**

Antibody with azide - store at 2 to  $8^{\circ}$ C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

