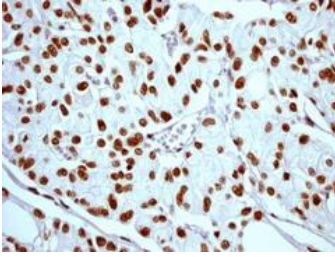




Catalog Number	GTX61796	Package: 100 µl	Reference (3)
Product Name	Histone H2A.XS139ph (phospho Ser139) antibody [EP854(2)Y]		
Full Name	H2A histone family, member X		
Synonyms	gamma H2AX, H2A.XS139ph, Phospho Histone H2A.X (pS139)		
Product Description	Rabbit monoclonal antibody [EP854(2)Y] to Histone H2A.x (phospho Ser139)		
Background	<p>Histones are basic nuclear proteins that are responsible for the structure of eukaryotic chromosomal fibers. H2AX is a member of the histone H2A family which is one of the four core histones making up the nucleosome core particle. Double-stranded breaks in DNA caused by replication errors, apoptosis, physiological processes and DNA damage caused by ionizing radiation, UV light or cytotoxic agents lead to phosphorylation of H2AX on serine 139. H2AX (pS139) is also referred to as H2AX (pS140) when the N-terminal methionine that is normally excised during posttranslational processing is included in amino acid sequence numbering. The phosphorylation of H2AX can be detected by Western blotting or immunofluorescence, revealing the frequency of DSBs. The phosphatidylinositol 3-kinases have been implicated in H2AX phosphorylation, but it is unclear if ATM is the primary H2AX kinase or if other members of the family such as DNA-PK and ATR contribute in a similar manner.</p>		
Host	Rabbit		
Clonality	Monoclonal		
Clone Name	EP854(2)Y		
Isotype	IgG		
Target	Histone H2A.x Phospho (pS139)		
Immunogen	A synthetic phospho-peptide corresponding to residues surrounding serine 139 of human H2A.x protein.		
Antigen Species	Human		
Species Reactivity	Human, Mouse, Rat		
Applications	ICC/IF, IHC-P, WB		
Application Note	<p>Recommended Starting Dilutions: For WB: Use at a dilution of 1:1,000 - 10,000 For IHC: Use at a dilution of 1:50 - 100 For ICC: Use at a dilution of 1:50 - 100 Optimal working dilution for a specific application should be determined by the investigator.</p>		
Predicted Target Size	14		
Form Supplied	Liquid		
Purification	Cell Supernatant		
Storage Buffer	50 mM Tris-Glycine (pH 7.4), 0.15 M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA.		
Storage Instruction	Store at -20 °C. Stable for 12 months from date of receipt.		
Notes	For <i>In vitro</i> laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption. RabMAb® technology is covered by the following U.S. Patents, No. 5,675,063 and/or 7,429,488.		
ResearchArea	Cancer > DNA repair > Double-strand break repair > Homologous recombination Cancer > DNA repair > Regulation > Positive regulation Cancer > Type of cancer > Breast > Other		

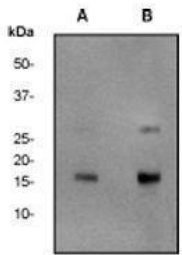
Application Reference

1. Perrigue PM (2015) *Mol Cancer Res* 636-50
2. Samoshkin A (2009) *PLoS One* e6831
3. Hovest MG (2011) *Exp Dermatol* 883-9



GTX61796 IHC-P Image

B. Immunohistochemical analysis of paraffin-embedded human kidney transitional cell carcinoma using anti-Histone H2A.x RabMAb (cat. #GTX61796).



GTX61796 WB Image

A. Western blot analysis on Jurkat cell lysates using anti-Phospho-H2A.x (pS139) RabMAb (cat. #GTX61796). Cells were either (A) untreated (B) treated with etoposide