

# AB-PN824

## H2AX-pS140 Antibody

Phosphosite-specific rabbit polyclonal antibody for H2AFX (H2AX; Histone H2A.X). This phosphoserine-site antibody also weakly cross-reacts with a phosphotyrosine substitution in the phosphosite.

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### Target Protein

<b>Protein Name Long:</b>	Histone H2A.X
<b>Protein Alias:</b>	H2A histone family, member X; H2A.X; H2a/x; HIST5-2AX; Histone H2A.X
<b>UniProt ID:</b>	P16104
<b>Protein Molecular Mass:</b>	15,145 Da (143 AA)

### Immunogen

<b>Antibody Immunogen Source:</b>	Synthetic phosphopeptide patterned after human H2AX
<b>Antibody Immunogen Sequence:</b>	CATQA(pS)QEY(-cooh)
<b>Antibody Immunogen Description:</b>	Corresponds to amino acid residues A136 to Y143. Phosphorylation of S140 regulates molecular associations and intracellular location. This is a significant <i>in vivo</i> site of phosphorylation by mass spectrometry ( $\geq 58$ reports by mass spectrometry in PhosphoSitePlus). H2AFX is known to be phosphorylated at this site <i>in vitro</i> by ATM, DNAPK, MST1, JNK1, and JNK2.
<b>Antibody Target Type:</b>	Phosphosite-specific

### Production

<b>Antibody Host Species:</b>	Rabbit
<b>Antibody Type:</b>	Polyclonal
<b>Antibody Isotype:</b>	IgG
<b>Production Method:</b>	The immunizing peptide was produced by solid phase synthesis on a multipep peptide synthesizer and purified by reverse-phase hplc chromatography. Purity was assessed by analytical hplc and the amino acid sequence confirmed by mass spectrometry analysis. This peptide was coupled to KLH prior to immunization into rabbits. New Zealand White rabbits were subcutaneously injected with KLH-coupled immunizing peptide every 4 weeks for 4 months. The sera from these animals was applied onto an agarose column to which the immunogen peptide was thio-linked. Antibody was eluted from the column with 0.1 M glycine, pH 2.5. Subsequently, the antibody solution was neutralized to pH 7.0 with saturated Tris.
<b>Amount:</b>	25 $\mu$ g
<b>Antibody Concentration:</b>	1 mg/ml
<b>Storage Buffer:</b>	Phosphate buffered saline pH 7.4, 0.05% Thimerasol
<b>Storage Conditions:</b>	For long term storage, keep frozen at $-40^{\circ}\text{C}$ or lower. Stock solution can be kept at $+4^{\circ}\text{C}$ for more than 3 months. Avoid repeated freeze-thaw cycles.
<b>Storage Stability:</b>	$>2$ years

## Applications

<b>Product Use:</b>	Western blotting   Antibody microarray
<b>Antibody Dilution Recommended:</b>	2 µg/ml for immunoblotting
<b>Antibody Species Reactivity:</b>	Human   Dog   Mouse   Frog

This product is for *in vitro* research use only and is not intended for use in humans or animals.

For more information on our products please visit <https://kinexus-ca.myshopify.com/> or contact us at 1-866-546-3987