

# AB-PN827

## HTT-pS13+pS16 Antibody

Phosphosite-specific rabbit polyclonal antibody for Huntingtin (HTT). This phosphoserine-site antibody also cross-reacts with phosphothreonine, serine, threonine and weakly with phosphotyrosine substitution in the phosphosite.

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### Target Protein

|                                |                                                                                                     |
|--------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Protein Name Long:</b>      | Huntingtin                                                                                          |
| <b>Protein Alias:</b>          | HD; HD protein; HDH; Huntington's disease protein; Huntington's disease protein homolog; IT15; NT17 |
| <b>UniProt ID:</b>             | P42858                                                                                              |
| <b>Protein Molecular Mass:</b> | 347,860 Da (3,144 AA)                                                                               |

### Immunogen

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| <b>Antibody Immunogen Source:</b>      | Synthetic phosphopeptide patterned after human HTT                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Antibody Immunogen Sequence:</b>    | CAFE(pS)LK(pS)FQQ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Antibody Immunogen Description:</b> | Corresponds to amino acid residues A10 to Q19. Phosphorylation of S13 and S16 induces interaction with HMGB1 and inhibits binding to Exportin-1, and inhibits apoptosis and exocytosis. These are two of the minor <i>in vivo</i> phosphorylation sites in HTT ( $\geq 3$ and $> 2$ mass spectrometry reports, respectively, recorded in PhosphoSitePlus). Huntingtin is known to be phosphorylated <i>in vitro</i> at S13 by HGK, IKK $\beta$ , TBK1, and TNIK, and at S16 by IKK $\beta$ and TBK1. |
| <b>Antibody Target Type:</b>           | Phosphosite-specific                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

### Production

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| <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 multipеп 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°C or lower. Stock solution can be kept at +4°C for more than 3 months. Avoid repeated freeze-thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Storage Stability:</b>      | >2 years                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## Applications

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|---------------------------------------|-------------------------------------------------------------------------------------------------|
| <b>Product Use:</b>                   | Western blotting   Antibody microarray                                                          |
| <b>Antibody Dilution Recommended:</b> | 2 µg/ml for immunoblotting                                                                      |
| <b>Antibody Species Reactivity:</b>   | Human   Chimpanzee   Rhesus macaque   Dog   Rat   Mouse   Chicken   Zebra fish   Tiger blowfish |

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