

# AB-PN862

## KRas-pS181 Antibody

Phosphosite-specific rabbit polyclonal antibody for KRAS (K-Ras; KRAS2; RASK2)

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### Target Protein

|                                |                                                                                            |
|--------------------------------|--------------------------------------------------------------------------------------------|
| <b>Protein Name Long:</b>      | GTPase Kirsten Sarcoma Protein Ras                                                         |
| <b>Protein Alias:</b>          | GTPase HRas; GTPase KRas; GTPase NRas; Ha Ras; K Ras; K ras p21; KRAS; NRAS; p21ras; RASH2 |
| <b>UniProt ID:</b>             | P01116                                                                                     |
| <b>Protein Molecular Mass:</b> | 21,656 Da (189 AA)                                                                         |

### Immunogen

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Antibody Immunogen Source:</b>      | Synthetic phosphopeptide patterned after human KRas                                                                                                                                                                                                                                                                                                                                                            |
| <b>Antibody Immunogen Sequence:</b>    | KKK(pS)KTK(βA)C                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Antibody Immunogen Description:</b> | Corresponds to amino acid residues K178 to K184. Phosphorylation of K-Ras isoform 2 at S181 stimulates its activity and its interaction with RhoA, and inhibits binding to calmodulin, PDE6D and Raf1. Phosphorylation of this site has not been recorded by high throughput mass spectrometry studies in PhosphoSitePlus. KRAS is known to be phosphorylated at this site <i>in vitro</i> by PKACA, and PKCa. |
| <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 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 µg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <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   Mouse                          |

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