

## Immunotag™ PLK4 Antibody

| Antibody Specification |  |
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| Catalog No.            | ITA7995  |
| Product Description    | Immunotag™ PLK4 Antibody   |
| Size                   | 100 µg, 200 µg   |
| Conjugation            | HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647  |
| IMPORTANT NOTE         | This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.   |
| Target Protein         | PLK4   |
| Clonality              | Polyclonal   |
| Storage/Stability      | -20°C/1 year   |
| Application            | WB,ELISA   |
| Recommended Dilution   | WB 1:1000-3000   |
| Concentration          | 1 mg/ml  |
| Reactive Species       | Human,Mouse,Rat  |
| Host Species           | Rabbit   |
| Immunogen              | A synthesized peptide derived from human PLK4  |
| Specificity            | PLK4 Antibody detects endogenous levels of total PLK4  |
| Purification           | The antiserum was purified by peptide affinity chromatography.   |
| Form                   | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt  |
| Gene Name              | PLK4   |
| Accession No.          | O00444   |
| Alternate Names        | PLK 4; PLK-4; PLK4; PLK4_HUMAN; Polo like Kinase 4; Polo-like kinase 4; Protein serine/threonine kinase; SAK; Serine/Threonine Kinase 18; Serine/threonine kinase; Serine/threonine protein kinase 18; Serine/threonine protein kinase PLK4; Serine/threonine protein kinase Sak; Serine/threonine-protein kinase 18; Serine/threonine-protein kinase PLK4; Serine/threonine-protein kinase SAK; Snk Akin Kinase; STK 18; STK18; |

## Antibody Specification

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| Description               | Serine/threonine-protein kinase that plays a central role in centriole duplication. Able to trigger procentriole formation on the surface of the parental centriole cylinder, leading to the recruitment of centriole biogenesis proteins such as SASS6, CENPJ/CPAP, CCP110, CEP135 and gamma-tubulin. When overexpressed, it is able to induce centrosome amplification through the simultaneous generation of multiple procentrioles adjoining each parental centriole during S phase. Phosphorylates 'Ser-151' of FBXW5 during the G1/S transition, leading to inhibit FBXW5 ability to ubiquitinate SASS6. Its central role in centriole replication suggests a possible role in tumorigenesis, centrosome aberrations being frequently observed in tumors. Also involved in deuterosome-mediated centriole amplification in multiciliated that can generate more than 100 centrioles. Also involved in trophoblast differentiation by phosphorylating HAND1, leading to disrupt the interaction between HAND1 and MDFIC and activate HAND1. Phosphorylates CDC25C and CHEK2. Required for the recruitment of STIL to the centriole and for STIL-mediated centriole amplification (PubMed:22020124). |
| Cell Pathway/<br>Category | Primary Polyclonal Antibody  |
| Protein MW                | 95 kDa   |
| Usage                     | For Research Use Only! Not for diagnostic or therapeutic procedures.   |