## **Immunotag™ SMC1B Polyclonal Antibody**

| Antibody Specification    |   |  |
|---------------------------|---|--|
| Catalog No.               | ITN2406   |  |
| Product<br>Description    | Immunotag™ SMC1B Polyclonal Antibody  |  |
| Size                      | 50 μg, 100 μg   |  |
| Conjugation               | HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647   |  |
| IMPORTANT<br>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            | SMC1B   |  |
| Clonality                 | Polyclonal  |  |
| Storage/Stability         | -20°C/1 year  |  |
| Application               | WB,ELISA  |  |
| Recommended<br>Dilution   | WB 1:500-2000 ELISA 1:5000-20000  |  |
| Concentration             | 1 mg/ml   |  |
| Reactive Species          | Human   |  |
| Host Species              | Rabbit  |  |
| Immunogen                 | Synthesized peptide derived from human protein . at AA range: 110-190   |  |
| Specificity               | SMC1B Polyclonal Antibody detects endogenous levels of protein.   |  |
| Purification              | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen  |  |
| Form                      | Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.  |  |
| Gene Name                 | SMC1B SMC1L2  |  |
| Accession No.             | Q8NDV3 Q920F6   |  |
| Description               | structural maintenance of chromosomes 1B(SMC1B) Homo sapiens SMC1L2 belongs to a family of proteins required for chromatid cohesion and DNA recombination during meiosis and mitosis (3:Revenkova et al., 2001 [PubMed 11564881]).[supplied by OMIM, Mar 2008], |  |
| Cell Pathway/<br>Category | Cell_Cycle_G1S,Cell_Cycle_G2M_DNA,Oocyte meiosis,   |  |

| Antibody Specification      |  |
|-----------------------------|--|
| Protein<br>Expression       | Epithelium,Testis,   |
| Subcellular<br>Localization | chromosome, centromeric region,lateral element,nucleoplasm,cytoplasm,meiotic cohesin complex,nuclear meiotic cohesin complex,  |
| Protein Function            | domain:The flexible hinge domain, which separates the large intramolecular coiled coil regions, allows the heterotypic interaction with the corresponding domain of SMC3, forming a V-shaped heterodimer. The two heads of the heterodimer are then connected by different ends of the cleavable RAD21 or REC8 protein, forming a ring structure.,function:Meiosisspecific component of cohesin complex. Required for the maintenance of meiotic cohesion, but not, or only to a minor extent, for its establishment. Contributes to axial element (AE) formation and the organization of chromatin loops along the AE. Plays a key role in synapsis, recombination and chromosome movements. The cohesin complex is required for the cohesion of sister chromatids after DNA replication. The cohesin complex apparently forms a large proteinaceous ring within which sister chromatids can be trapped. At anaphase, the complex is cleaved and dissociates from chromatin, allowing sister chromatids to segregate. The meiosis-specific cohesin complex probably replaces mitosis specific cohesin complex when it dissociates from chromatin during prophase I.,similarity:Belongs to the SMC family. SMC1 subfamily.,subcellular location:Associates with chromatin. In prophase I stage of meiosis, localizes along the AE of synaptonemal complexes. In late-pachytene-diplotene, the bulk of protein dissociates from the chromosome arms probably because of phosphorylation by PLK, except at centromeres, where cohesin complexes remain. Remains chromatin associated at the centromeres up to metaphase II. At anaphase II, dissociates from centromeres, allowing chromosomes segregation.,subunit:Forms a heterodimer with SMC3. Component of a meiosis-specific cohesin complex, probably composed of the SMC1B and SMC3 heterodimer attached via their hinge domain, RAD21 (or its meiosis-specific related protein REC8), which link them, and STAG3, which interacts with RAD21 or REC8. |
| Usage                       | For Research Use Only! Not for diagnostic or therapeutic procedures.   |

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