

Immunotag™ PIWIL4 Antibody

| Antibody Specification | |
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| Catalog No. | ITA7280 |
| Product Description | Immunotag™ PIWIL4 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 | PIWIL4 |
| Clonality | Polyclonal |
| Storage/Stability | -20°C/1 year |
| Application | WB,ELISA |
| Recommended Dilution | WB 1:500-1:2000 |
| Concentration | 1 mg/ml |
| Reactive Species | Human,Mouse,Rat |
| Host Species | Rabbit |
| Immunogen | Fusion protein of human PIWIL4 |
| Specificity | PIWIL4 Antibody detects endogenous levels of total PIWIL4 |
| 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 | PIWIL4 |
| Accession No. | Q7Z3Z4 |
| Alternate Names | DKFZp686P01248; FLJ36156; HILI 2; HILI2; HIWI 2; HIWI2; Miwi 2 protein; Miwi2; PIWI; Piwi like 2; Piwi like 4 (Drosophila); Piwi like 4; Piwi like protein 4; PIWI like protein; Piwi like RNA mediated gene silencing 4; Piwi-like protein 4; PIWIL 4; Piwil4; PIWL4_HUMAN; |

Antibody Specification

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| Description | Plays a central role during spermatogenesis by repressing transposable elements and preventing their mobilization, which is essential for the germline integrity (By similarity). Acts via the piRNA metabolic process, which mediates the repression of transposable elements during meiosis by forming complexes composed of piRNAs and Piwi proteins and governs the methylation and subsequent repression of transposons (By similarity). Directly binds piRNAs, a class of 24 to 30 nucleotide RNAs that are generated by a Dicer-independent mechanism and are primarily derived from transposons and other repeated sequence elements (By similarity). Associates with secondary piRNAs antisense and PIWIL2/MILI is required for such association (By similarity). The piRNA process acts upstream of known mediators of DNA methylation (By similarity). Does not show endonuclease activity (By similarity). Plays a key role in the piRNA amplification loop, also named ping-pong amplification cycle, by acting as a 'slicer-incompetent' component that loads cleaved piRNAs from the 'slicer-competent' component PIWIL2 and target them on genomic transposon loci in the nucleus (By similarity). May be involved in the chromatin-modifying pathway by inducing 'Lys-9' methylation of histone H3 at some loci (PubMed:17544373). |
| Cell Pathway/ Category | Primary Polyclonal Antibody |
| Protein MW | 97kDa |
| Usage | For Research Use Only! Not for diagnostic or therapeutic procedures. |