

## Human Polymerase DNA Directed Gamma 1 (POLg1) ELISA Kit | POLg1 elisa kit

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CATALOG #  
**AAA66006**

REACTIVITY  
**Human**

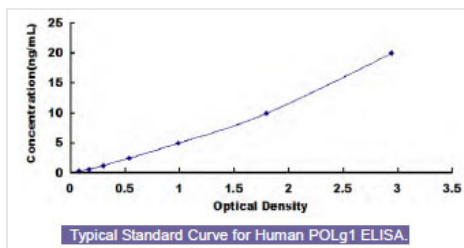
### PRODUCT SYNONYMS

Polymerase DNA Directed Gamma 1 (POLg1); Human Polymerase DNA Directed Gamma 1 (POLg1) ELISA Kit; HD1; PCN; EBS1; EBSO; PLEC1b; PLTN; Intermediate Filament Binding Protein 500kDa; POLg1 elisa kit

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                            |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity              | Human                                                                                                                                                                                                      |
| Specificity             | This assay has high sensitivity and excellent specificity for detection of POLg1. No significant cross-reactivity or interference between POLg1 and analogues was observed.                                |
| Sequence Length         | 1239                                                                                                                                                                                                       |
| Samples                 | Tissue homogenates, cell lysates and other biological fluids.                                                                                                                                              |
| Assay Type              | Sandwich                                                                                                                                                                                                   |
| Detection Range         | 0.312-20ng/mL                                                                                                                                                                                              |
| Sensitivity             | 0.123ng/mL                                                                                                                                                                                                 |
| Intra-assay Precision   | Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level POLg1 were tested 20 times on one plate, respectively. Intra-Assay: CV<10%                                    |
| Inter-assay Precision   | Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level POLg1 were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100. Inter-Assay: CV<12%  |
| Preparation and Storage | For unopened kit, all reagents should be kept according to the labels on vials. The TMB Substrate, Wash Buffer, Stop Solution should be stored at 4 degree C. All others should be stored at -20 degree C. |

### IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for POLg1 elisa kit | <p>Intended Uses: The kit is a sandwich enzyme immunoassay for in vitro quantitative measurement of POLg1 in human tissue homogenates, cell lysates and other biological fluids.</p> <p>Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to POLg1. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific to POLg1. Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain POLg1, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm +/- 10nm. The concentration of POLg1 in the samples is then determined by comparing the O.D. of the samples to the standard curve.</p> |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

NCBI AND UNIPROT INFORMATION

|                                  |                                                               |
|----------------------------------|---------------------------------------------------------------|
| NCBI GI #                        | 187171277                                                     |
| NCBI GeneID                      | 5428                                                          |
| NCBI Accession #                 | NP_001119603.1                                                |
| NCBI GenBank Nucleotide #        | NM_001126131.1                                                |
| UniProt Accession #              | P54098; Q8NFM2; Q92515                                        |
| Molecular Weight                 | 139,562 Da                                                    |
| NCBI Official Full Name          | DNA polymerase subunit gamma-1                                |
| NCBI Official Synonym Full Names | DNA polymerase gamma, catalytic subunit                       |
| NCBI Official Symbol             | POLG                                                          |
| NCBI Official Synonym Symbols    | PEO; MDP1; SCAE; MIRAS; POLG1; POLGA; SANDO; MTDPS4A; MTDPS4B |
| NCBI Protein Information         | DNA polymerase subunit gamma-1                                |
| UniProt Protein Name             | DNA polymerase subunit gamma-1                                |
| UniProt Gene Name                | POLG                                                          |
| UniProt Synonym Gene Names       | MDP1; POLG1; POLGA                                            |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/human-elisa-kits/polymerase-dna-directed-gamma-1-polg1/66006>