

## Human Lactoperoxidase (LPO) ELISA Kit | LPO elisa kit

Human Lactoperoxidase (LPO) ELISA Kit

CATALOG #  
**AAA332001**

REACTIVITY  
**Human**

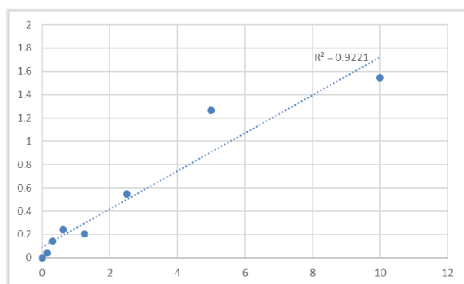
### PRODUCT SYNONYMS

Lactoperoxidase (LPO); Human Lactoperoxidase (LPO) ELISA Kit; LPO; MGC129990; MGC129991; SPO; salivary peroxidase; LPO elisa kit

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| Reactivity              | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Specificity             | Human Lactoperoxidase (LPO) ELISA Kit has high sensitivity and excellent specificity for detection of Human LPO. No significant cross-reactivity or interference between Human LPO and analogues was observed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Sequence Length         | 629                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Assay Type              | Sandwich ELISA (Quantitative)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Samples                 | Cell Culture Supernatants, Serum, Plasma, Other Biological Fluids                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Detection Method        | Colorimetric                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Usage Notes             | <ul style="list-style-type: none"> <li>* Do not mix components from different kit lots or use reagents beyond the kit expiration date.</li> <li>* Allow all reagents to warm to room temperature for at least 30 minutes before opening.</li> <li>* Pre-rinse the pipet tip with reagent, use fresh pipet tips for each sample, standard and reagent to avoid contamination.</li> <li>* Unused wells must be kept desiccated at 4 degree C in the sealed bag provided.</li> <li>* Mix Thoroughly is very important for the result. It is recommended using low frequency oscillator or slight hand shaking every 10 minutes.</li> <li>* It is recommended that all samples and standards be assayed in duplicate or triplicate.</li> </ul> |
| Preparation and Storage | Store at 2-8 degree C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

### IMAGES



**Standard Curve (Sample)**

Fig.1. Human Lactoperoxidase (LPO) Standard Curve.

ADDITIONAL INFORMATION

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for LPO elisa kit | <p>Description: This Human Lactoperoxidase (LPO) ELISA Kit employs a two-site sandwich ELISA to quantitate LPO in samples. An antibody specific for LPO has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any LPO present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for LPO is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of LPO bound in the initial step. The color development is stopped and the intensity of the color is measured.</p> <p>Background: Lactoperoxidase is a peroxidase enzyme found in milk. It is able to form reactive bromine and iodine species, resulting in natural organobromine and organoiodine substances, and can therefore be categorised as a haloperoxidase. It is fairly heat resistant and was widely used as an indicator of overpasteurization of milk. Freshly isolated and purified samples of goat LPO were saturated with ammonium iodide and crystallized using 20% polyethylene glycol 3350 in a hanging drop vapor diffusion setup. Goat LPO consists of a single polypeptide chain of 595 amino acid residues and folds into an oval-shaped structure. The structure contains 20 well-defined alpha-helices of varying lengths including a helix, H(2a), unique to LPO, and two short antiparallel beta-strands.</p> |
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NCBI AND UNIPROT INFORMATION

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|----------------------------------|-----------------------------------------|
| NCBI GI #                        | 231569458                               |
| NCBI GeneID                      | 4025                                    |
| NCBI Accession #                 | NP_001153574                            |
| NCBI GenBank Nucleotide #        | NP_001153574.1                          |
| UniProt Accession #              | P22079                                  |
| NCBI Official Full Name          | lactoperoxidase isoform 3 preproprotein |
| NCBI Official Synonym Full Names | lactoperoxidase                         |
| NCBI Official Symbol             | LPO                                     |
| NCBI Official Synonym Symbols    | SPO                                     |
| NCBI Protein Information         | lactoperoxidase                         |
| UniProt Protein Name             | Lactoperoxidase                         |
| UniProt Gene Name                | LPO                                     |
| UniProt Synonym Gene Names       | SAPX; LPO; SPO                          |
| UniProt Entry Name               | PERL_HUMAN                              |

**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.