

## Datasheet for KOA0888

**Nitrotyrosine ELISA Kit****Overview**

|                      |                                              |
|----------------------|----------------------------------------------|
| <b>Description:</b>  | Nitrotyrosine AccuSignal ELISA Kit - KOA0888 |
| <b>Item No.:</b>     | KOA0888                                      |
| <b>Size:</b>         | 1 Kit                                        |
| <b>Applications:</b> | ELISA                                        |
| <b>Reactivity:</b>   | Broad                                        |
| <b>Range:</b>        | 62.5 ng/ml - 8000 nM                         |

**Product Details**

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| <b>Background:</b>         | Nitrotyrosine has been identified as a marker of inflammation and NO production. Nitrotyrosine is formed in presence of the active metabolite NO. Various pathways including the formation of peroxynitrite lead to nitrotyrosine production. Since nitrotyrosine is a stable end product of peroxynitrite oxidation, assessment of its plasma concentration may be useful as a marker of NO-dependent damage in vivo. Since NOX is only an indicator for enhanced NO production, protein associated nitrotyrosine might be a more suitable marker for damage induced by reactive nitrogen intermediates derived from NO. Furthermore, most proteins have a longer half life in the circulation than NOX levels. The presence of nitrotyrosine has been detected in various inflammatory processes including atherosclerotic plaques, celiac disease, rheumatoid arthritis, chronic renal failure and septic shock. In normal plasma low, undetectable, levels of nitrotyrosine are present. Nitrosylation of the amino acid tyrosine occurs both for free tyrosine and for protein bound tyrosine. |
| <b>Synonyms:</b>           | Nitro tyrosine ELISA Kit, Nitrosylation, NOX, Nitrotyrosine ELISA KIT, Nitrotyrosine Enzyme-Linked Immunosorbent Assay, 3-Nitrotyrosine ELISA Kit, 3-Nitro-L-tyrosine ELISA Kit, 3 Nitrotyrosine ELISA Kit, 3-NT ELISA Kit, 3NT ELISA Kit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Conjugate:</b>          | Peroxidase (HRP)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Clonality:</b>          | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Detection Kit Type:</b> | ELISA Kit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Detection Range:</b>    | 62.5 ng/ml - 8000 nM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Sensitivity:</b>        | 50 nm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

## Target Details

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| <b>Reactivity:</b>         | Broad                                                                                                                                                                                                 |
| <b>Purity/Specificity:</b> | This kit contains: 96 wells coated plate, Target Protein Standard, HRP Conjugated Monoclonal Antibody, Diluent, Wash buffer, TMB Substrate and stop reagent, see protocol for additional information. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li><a href="#">KOA0888 Protocol</a></li></ul>                                                                                                                      |

## Application Details

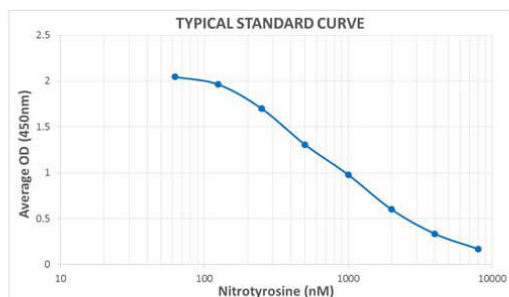
|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| <b>Tested Applications:</b> | ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Application Note:</b>    | Colorimetric Competitive ELISA (Enzyme-linked Immunosorbent Assay) assay for quantification of Free Nitrotyrosine in Cell lysates, Plasma, Serum, and Urine. Sensitivity: 50nM. Range: 62.5-8000nM.                                                                                                                                                                                                                                               |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                                                                                                                                                   |
| <b>Other:</b>               | <p>Intra-Assay Precision: Three samples of known concentration were assayed thirty times on one plate. The intra-assay coefficient of variation of the Nitrotyrosine ELISA has been determined to be &lt;10%.</p> <p>Inter-Assay Precision: Three samples of known concentration were assayed thirty times in three individual assays. The inter-assay coefficient of variation of the Nitrotyrosine ELISA has been determined to be &lt;15%.</p> |

## Formulation

## Shipping & Handling

|                            |                                                                   |
|----------------------------|-------------------------------------------------------------------|
| <b>Shipping Condition:</b> | Wet Ice                                                           |
| <b>Storage Condition:</b>  | See kit insert for component storage. Store kit at 4°C and -20°C. |
| <b>Expiration:</b>         | Expiration date is one (1) year from date of receipt.             |

## Images



### ELISA

ELISA results of Nitrotyrosine displaying a typical Standard Curve for this kit using competitive/colorimetric ELISA Assay. Assay range 62.5 - 8000nM.

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.