

## Datasheet for KOA0849

**Human COMT ELISA Kit****Overview**

|                      |                                           |
|----------------------|-------------------------------------------|
| <b>Description:</b>  | Human COMT AccuSignal ELISA Kit - KOA0849 |
| <b>Item No.:</b>     | KOA0849                                   |
| <b>Size:</b>         | 1 Kit                                     |
| <b>Applications:</b> | ELISA                                     |
| <b>Reactivity:</b>   | Human                                     |
| <b>Range:</b>        | 31.2 pg/ml - 2000 pg/ml                   |

**Product Details**

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>         | Catechol-O-methyltransferase (COMT) is one of several enzymes that degrade catecholamines such as dopamine, epinephrine, and norepinephrine. In humans, catechol-O-methyltransferase protein is encoded by the COMT gene. As the regulation of catecholamines is impaired in a number of medical conditions, several pharmaceutical drugs target COMT to alter its activity and therefore the availability of catecholamines. In the brain, COMT-dependent dopamine degradation is of particular importance in brain regions with low expression of the presynaptic dopamine transporter (DAT), such as the prefrontal cortex. This process is supposed to take place in postsynaptic neurons, as, in general, COMT is located intracellularly in the central nervous system (CNS). |
| <b>Synonyms:</b>           | Catechol O methyltransferase, Catechol O-methyltransferase, COMT, COMT_HUMAN, EC 2.1.1.6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Detection Kit Type:</b> | ELISA Kit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Detection Range:</b>    | 31.2 pg/ml - 2000 pg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Sensitivity:</b>        | <10 pg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

**Target Details**

|                            |                                                                                                           |
|----------------------------|-----------------------------------------------------------------------------------------------------------|
| <b>Gene Name:</b>          | COMT                                                                                                      |
| <b>Reactivity:</b>         | Human                                                                                                     |
| <b>Immunogen:</b>          | Expression system for standard: E.coli; Immunogen sequence: G52-P271                                      |
| <b>Purity/Specificity:</b> | Natural and recombinant human COMT. There is no detectable cross-reactivity with other relevant proteins. |

**Relevant Links:**

- [UniProtKB - P21964](#)
- [NCBI - NP\\_000745.1](#)
- [GeneID - 1312](#)
- [KOA0849 Protocol](#)

## Application Details

**Tested Applications:** ELISA

**Application Note:** Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 2000pg/ml, 1000pg/ml, 500pg/ml, 250pg/ml, 125pg/ml, 62.5pg/ml, 31.2pg/ml human COMT standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of human cell culture supernates, serum and plasma (heparin, EDTA) to each empty well. It is recommended that each human COMT standard solution and each sample be measured in duplicate.

**Assay Dilutions:** All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

## Formulation

**Anticoagulant:** Heparin Sodium

## Shipping & Handling

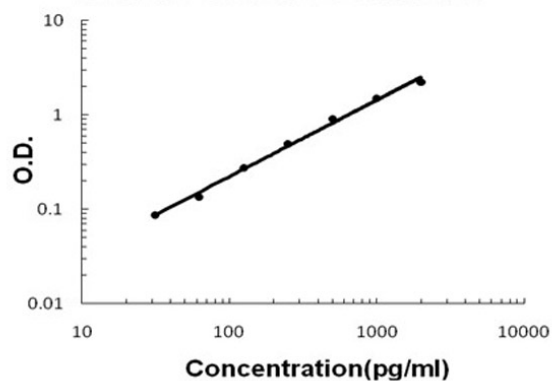
**Shipping Condition:** Wet Ice

**Storage Condition:** Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing.

**Expiration:** See kit insert for complete instructions.

## Images

### Human COMT ELISA Kit



### ELISA

Human COMT ELISA Kit standard curve.

## 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.