



# Human Receptor tyrosine-protein kinase erbB-3(ERBB3) ELISA kit

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| <b>Product Code</b>         | CSB-EL007765HU                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Abbreviation</b>         | ERBB3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Target Name</b>          | v-erb-b2 erythroblastic leukemia viral oncogene homolog 3 (avian)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Uniprot No.</b>          | P21860                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Alias</b>                | ErbB-3, HER3, LCCS2, MDA-BF-1, MGC88033, c-erbB-3, c-erbB3, erbB3-S, p180-ErbB3, p45-sErbB3, p85-sErbB3, erbB-3 receptor tyrosine-protein kinase erbB-3 v-erb-b2 avian erythroblastic leukemia viral o                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Product Type</b>         | ELISA Kit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Immunogen Species</b>    | Homo sapiens (Human)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Sample Types</b>         | serum, plasma, tissue homogenates                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Detection Range</b>      | 125 pg/mL-8000 pg/mL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Sensitivity</b>          | 31.25 pg/mL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Assay Time</b>           | 1-5h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Sample Volume</b>        | 50-100ul                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Detection Wavelength</b> | 450 nm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Lead Time</b>            | 3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Research Area</b>        | Signal Transduction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Gene Names</b>           | ERBB3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Tag Info</b>             | quantitative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Protein Description</b>  | Sandwich                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Target Details</b>       | <p>This gene encodes a member of the epidermal growth factor receptor (EGFR) family of receptor tyrosine kinases. This membrane-bound protein has a neuregulin binding domain but not an active kinase domain. It therefore can bind this ligand but not convey the signal into the cell through protein phosphorylation. However, it does form heterodimers with other EGF receptor family members which do have kinase activity. Heterodimerization leads to the activation of pathways which lead to cell proliferation or differentiation. Amplification of this gene and/or overexpression of its protein have been reported in numerous cancers, including prostate, bladder, and breast tumors. Alternate transcriptional splice variants encoding different isoforms have been characterized. One isoform lacks the intermembrane region and is secreted outside the cell. This form acts to modulate the activity of the membrane-bound form. Additional splice variants have also been reported, but they have not been thoroughly characterized.</p> |



## Product Precision

### Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

### Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

## Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of human ERBB3 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

|     |           |            |
|-----|-----------|------------|
| ?   | Sample    | Serum(n=4) |
| 1:1 | Average % | 87         |
|     | Range %   | 82-94      |
| 1:2 | Average % | 98         |
|     | Range %   | 94-103     |
| 1:4 | Average % | 102        |
|     | Range %   | 98-106     |
| 1:8 | Average % | 95         |
|     | Range %   | 90-100     |

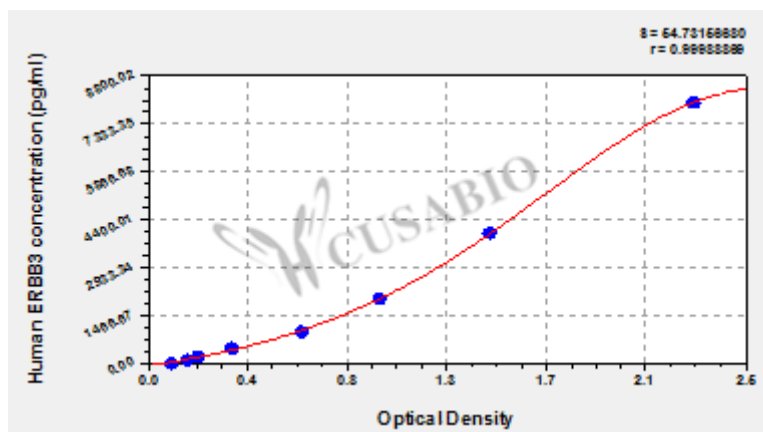
## Recovery

The recovery of human ERBB3 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

| Sample Type       | Average % Recovery | Range  |
|-------------------|--------------------|--------|
| Serum (n=5)       | 92                 | 88-97  |
| EDTA plasma (n=4) | 103                | 96-110 |

## Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



| pg/ml | OD1   | OD2   | Average | Corrected |
|-------|-------|-------|---------|-----------|
| 8000  | 2.292 | 2.267 | 2.280   | 2.172     |
| 4000  | 1.472 | 1.398 | 1.435   | 1.327     |
| 2000  | 0.956 | 0.998 | 0.977   | 0.869     |
| 1000  | 0.635 | 0.665 | 0.650   | 0.542     |
| 500   | 0.364 | 0.352 | 0.358   | 0.250     |
| 250   | 0.225 | 0.212 | 0.219   | 0.111     |
| 125   | 0.171 | 0.181 | 0.176   | 0.068     |
| 0     | 0.107 | 0.109 | 0.108   | ?         |

## Msds

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{
  "0": {
    "fileurl": "https://www.cusabio.com/uploadfile/msds/MSDS CSB-EL007765HU.pdf",
    "filename": "MSDS"
  }
}
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