EGF
Human Epidermal Growth Factor ELISA Kit

Catalog No.	CK401	**Quantity:**	1 x 96 tests

Description: Epidermal Growth Factor (EGF) is found in varying concentrations in milk, saliva, urine, plasma and also in most other body fluids. EGF controls and stimulates the proliferation of epidermal and epithelial cells, including fibroblasts, kidney epithelial cells, human glial cells, ovary granulosa cells, and thyroid cells *in vitro*. The proliferation of some cell lines has been shown to be inhibited by EGF. EGF is a strong chemoattractant for fibroblasts and epithelial cells. EGF alone and also in combination with other cytokines is an important factor mediating wound healing processes. EGF has a profound effect on the differentiation of specific cells *in vivo* and is a potent mitogenic factor for a variety of cultured cells of both ectodermal and mesodermal origin. The EGF precursor is believed to exist as a membrane-bound molecule which is proteolytically cleaved to generate the 53 aa peptide hormone that stimulates cells to divide.
The Human EGF ELISA is an in vitro enzyme-linked immunosorbent assay for the quantitative measurement of Human EGF in serum, plasma, cell culture supernatants and urine. This assay employs an antibody specific for EGF coated on a 96-well plate. Standards and samples are pipetted into the wells and EGF present in a sample is bound to the wells by the immobilized antibody. The wells are washed and Biotinylated Anti-Human EGF antibody is added. After washing away unbound Biotinylated antibody, HRP-Streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of EGF bound.

Sensitivity: The minimum detectable dose of EGF is typically less than 1 pg/mL.

Reproducibility: Intra-Assay: CV<10%; Inter-Assay: CV<12%

Samples: Serum, plasma, cell culture supernatants and urine.

Recovery: Serum mean recovery of 95% (range 83-104%)
Plasma mean recovery of 94% (range 84-105%)
Cell culture media mean recovery of 96% (range 85-106%)

Reagents Included:
1. Microplate 96-wells coated with Capture Antibody
2. Wash Buffer Concentrate (20x)
3. Standards
4. Assay Diluent A: For Standard/Sample (Serum/Plasma)
5. Assay Diluent B: For Standard/Sample (Cell Culture Medium/Urine)
6. Biotinylated Detection Antibody
7. HRP-Streptavidin Concentrate
8. TMB One-Step Substrate Reagent
9. Stop Solution

Storage & Stability: May be stored for up to 6 months at 2-8°C from the date of shipment. Standard should be stored below -20°C (-80°C recommended) after reconstitution. Opened Microplate Wells and reagents may be store for up to 1 month at 2-8°C. Return unused wells to the pouch containing desiccant pack, reseal along entire edge of zip seal.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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