

Rat EGF CLIA Kit | EGF clia kit

EGF (Rat) LumiAb ELISA Kit

CATALOG #
AAA318584

REACTIVITY
Rat

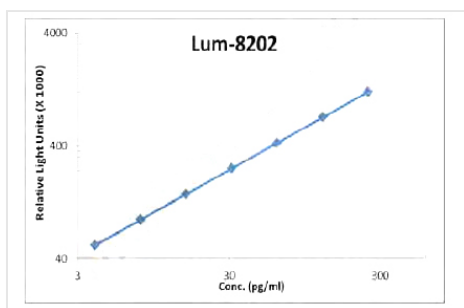
PRODUCT SYNONYMS

EGF; EGF (Rat) LumiAb ELISA Kit; Rat EGF; Epidermal growth factor; EGF clia kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Specificity	The LumiAb Murine VEGF ELISA is capable of recognizing both recombinant and naturally produced Murine VEGF proteins. The antigens listed below were tested at 50 ng/ml and exhibited 100% cross reactivity.
Sequence Length	1133
Assay Type	Quantitative Sandwich
Sensitivity	6 pg/ml.
Preparation and Storage	Store at 4 degree C for 6 months.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for EGF clia kit	Principle of the Assay: The LumiAb Murine VEGF Chemiluminescent ELISA Kit contains the components necessary for quantitative determination of natural or recombinant Murine VEGF concentrations within any experimental sample including cell lysates, serum and plasma. This particular immunoassay utilizes the quantitative technique of a "Sandwich" Enzyme-Linked Immunosorbent Assay (ELISA) where the target protein (antigen) is bound in a "sandwich" format by the primary capture antibodies coated to each well-bottom and the secondary detection antibodies added subsequently by the investigator. The capture antibodies coated to the bottom of each well are specific for a particular epitope on Murine VEGF while the user-added detection antibodies bind to epitopes on the captured target protein. Amid each step of the procedure, a series of wash steps must be performed to ensure the elimination of non-specific binding between proteins to other proteins or to the solid phase. After incubation and "sandwiching" of the target antigen, a peroxidase enzyme is conjugated to the constant heavy chain of the secondary antibody (either covalently or via Avidin/Streptavidin-Biotin interactions), allowing for a sensitive luminescent reaction to ensue upon substrate addition. When the Peroxide Enhancer solution is added, the reaction catalyzed by peroxidase yields light that is representative of the antigen concentration. After a brief incubation, the microplate can be read with a luminometer, allowing for generation of a standard curve and subsequent determination of protein concentration!!Background/Introduction: Murine VEGF or Tumor Vascular Endothelial Growth Factor, also known as Vascular Permeability Factor, is a 214 amino acid cytokine protein expressed from the Vegf gene located on chromosome 17. After initial synthesis and translocation, the 26 residue signal sequence is cleaved, allowing the 188 residue VEGF peptide to fold properly. VEGF is a homodimeric, disulfide linked, growth factor active in angiogenesis, vasculogenesis and endothelial cell growth that functions to induce endothelial cell proliferation, promote cell migration, inhibit apoptosis and induce permeabilization of blood vessels. It binds to the FLT1/VEGFR1 and KDR/VEGFR2 receptors, heparin sulfate and heparin. Moreover, it may play a role in increasing vascular permeability during lactation, when increased transport of molecules from the blood is required for efficient milk protein synthesis. In developing embryos, VEGF is mainly expressed in the choroid plexus, paraventricular neuroepithelium, and placenta and kidney glomeruli. It is also found in bronchial epithelium, adrenal gland and in seminiferous tubules of the testis. High expression of VEGF continues in kidney glomeruli and choroid plexus in adults. Levels increase during pregnancy (maximum 5.5-fold at 5 days) and a more marked increase occurs during lactation (maximal 9.7-fold at 7 days) but decrease progressively during the phase of involution.
Product Categories/Family for EGF clia kit	Luminometer Sandwich ELISA

NCBI AND UNIPROT INFORMATION

NCBI GI #	6978797
NCBI GeneID	25313
NCBI Accession #	NP_036974.1
NCBI GenBank Nucleotide #	NM_012842.1
UniProt Accession #	P07522
NCBI Official Full Name	pro-epidermal growth factor
NCBI Official Synonym Full Names	epidermal growth factor
NCBI Official Symbol	Egf
NCBI Protein Information	pro-epidermal growth factor
UniProt Protein Name	Pro-epidermal growth factor
UniProt Gene Name	Egf
UniProt Synonym Gene Names	EGF
UniProt Entry Name	EGF_RAT

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.