

Mouse EGF CLIA Kit | EGF clia kit

EGF (Murine) LumiAb ELISA Kit

CATALOG #
AAA318566

REACTIVITY
Mouse

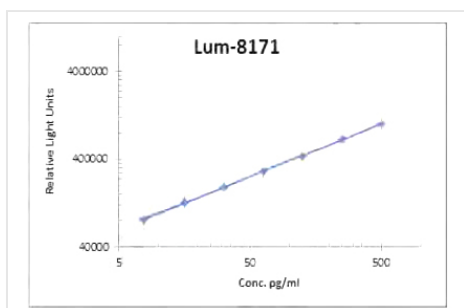
PRODUCT SYNONYMS

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

PRODUCT SPECIFICATIONS

Reactivity	Mouse
Specificity	The LumiAb Human VEGF ELISA is capable of recognizing both recombinant and naturally produced Human VEGF proteins. The antigens listed below were tested at 50 ng/ml and exhibited 100% cross reactivity.
Sequence Length	1217
Assay Type	Quantitative Sandwich
Sensitivity	4 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 Human VEGF Chemiluminescent ELISA Kit contains the components necessary for quantitative determination of natural or recombinant Human 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 Human 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: Human VEGF, also known as Vascular Endothelial Growth Factor, is a 232 amino acid growth factor protein encoded from the VEGFA gene located at locus 6p12 on chromosome 6. After initial synthesis, the 26 residue signal sequence is cleaved from the N-terminal end, allowing for the 206 residue VEGF protein to fold properly into its mature form. VEGF is known to be a growth factor active in angiogenesis, vasculogenesis and endothelial cell growth. Through binding to the FLT1/VEGFR1 and KDR/VEGFR2 receptors, heparin sulfate and heparin, homodimeric VEGF is able to induce endothelial cell proliferation, promote cell migration, as well as inhibit apoptosis and induce permeabilization of blood vessels. Moreover, NRP1/Neuropilin-1 binds isoforms VEGF165 and VEGF145, where isoform VEGF165B binds to KDR but does not activate downstream signaling pathways and does not activate angiogenesis, while inhibiting tumor growth. VEGF121 is acidic and freely secreted. VEGF165 is more basic, has heparin-binding properties and, although a significant proportion remains cell-associated, most is freely secreted. VEGF189 is very basic; it is cell-associated after secretion and is bound avidly by heparin and the extracellular matrix, although it may be released as a soluble form by heparin, heparinase or plasmin. Defects in VEGFA are a cause of susceptibility to microvascular complications of diabetes type 1 (MVCD1). These are pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus. They include diabetic retinopathy, diabetic nephropathy leading to end-stage renal disease, and diabetic neuropathy. Diabetic retinopathy remains the major cause of new-onset blindness among diabetic adults. It is characterized by vascular permeability and increased tissue ischemia and angiogenesis.
Product Categories/Family for EGF clia kit	Luminometer Sandwich ELISA

NCBI AND UNIPROT INFORMATION

NCBI GI #	170172524
NCBI GeneID	13645
NCBI Accession #	NP_034243.2
NCBI GenBank Nucleotide #	NM_010113.4
UniProt Accession #	P01132
NCBI Official Full Name	pro-epidermal growth factor isoform 1 preproprotein
NCBI Official Synonym Full Names	epidermal growth factor
NCBI Official Symbol	Egf
NCBI Official Synonym Symbols	AI790464
NCBI Protein Information	pro-epidermal growth factor
UniProt Protein Name	Pro-epidermal growth factor
UniProt Gene Name	Egf
UniProt Synonym Gene Names	EGF

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.

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Online datasheet: <https://stage.aaabiotech.com/mouse-clia-kits/egf/318566>