

Human angiotensin 2 ELISA Kit | ANGPT2 elisa kit

Human Angiotensin 2, ANG-2 ELISA Kit

CATALOG #
AAA80011

REACTIVITY
Human

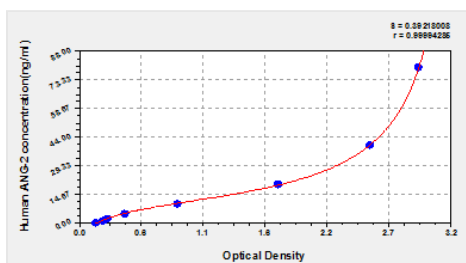
PRODUCT SYNONYMS

angiotensin 2; Human Angiotensin 2; ANG-2 ELISA Kit; AGPT2; ANG2; Tie2-ligand; angiotensin-2; angiotensin-2B; angiotensin-2a; ANGPT2 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	This assay has high sensitivity and excellent specificity for detection of Human ANGPT2. No significant cross-reactivity or interference between Human ANGPT2 and analogues was observed.
Sequence Length	495
Samples	Serum, plasma, tissue homogenates
Detection Range	1.25 ng/ml-80 ng/ml
Sensitivity	0.31 ng/ml
Intra-assay Precision	Intra-assay Precision (Precision within an assay): CV% is less than 8% Three samples of known concentration were tested twenty times on one plate to assess. Inter-assay Precision (Precision between assays): CV% is less than 10% Three samples of known concentration were tested in twenty assays to assess.
Detection Wavelength	450 nm
Sample Volume	50-100ul
Protein Biological Process 1	Angiogenesis
Protein Biological Process 3	Angiogenesis
Preparation and Storage	Unopened test kits should be stored at 2 to 8 degree C upon receipt. Please refer to pdf manual for further storage instructions.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for ANGPT2 elisa kit	Introduction: Angiopoietin-2 (Ang-2) is one of the critical regulators of tumor angiogenesis. Human and mouse Ang-2 share 85% amino acid identity and Ang-2 is approximately 60% identical to Ang-1. Ang-2 contains an N-terminal coiled-coil domain and a C-terminal fibrinogen-like domain. Located at the N-terminus are stretches of hydrophobic residues typical of secretory signal sequences. Although likely playing different functional roles, both Ang-1 and Ang-2 are ligands for the endothelial cell receptor tyrosine kinase Tie-2. The regulation of Tie-2 activity by Ang-2 is complex, leading to inhibition in certain cell types or conditions, and activation in others. In vitro studies demonstrated that Ang-1, but not Ang-2, could stimulate Tie-2 tyrosine phosphorylation and suggested that Ang-2 could act as a competitive inhibitor of Ang-1 signaling. Consistent with its role as an Ang-1/Tie-2 inhibitor, transgenic overexpression of Ang-2 leads to disruption of embryonic blood vessel formation, a phenotype similar to that of Tie-2 knockouts. In contrast, altering incubation times or elevating Ang-2 concentrations, can under some circumstances, result in Tie-2 activation in HUVECs. It has also been proposed that Ang-2 may play a pro-angiogenic role by mediating destabilizing interactions between endothelial and perivascular cells, enhancing the effects of pro-angiogenic proteins including vascular endothelial growth factor (VEGF). Alone, Ang-2 promotes endothelial cell death and vessel regression, but can act in synergy with VEGF to promote new vessel formation. Ang-2 has been implicated in cancer development due to its role in angiogenesis. Ang-2-mediated destabilization of mature vessel structures accompanied by the presence of VEGF, may contribute to the angiogenesis associated with tumor tissues. Several studies have examined Ang-2 expression in an assortment of human cancers. Ang-2 is elevated in colon carcinoma, gastric carcinoma, glioblastoma, glioma, hepatocellular carcinoma, neuroblastoma and non-small cell lung cancer. Furthermore, Ang-2 levels appear to correlate with advancing tumor stage progression and poor prognosis. Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to ANG-2. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific for ANG-2 and Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. Then a TMB (3,3',5,5' tetramethyl-benzidine) substrate solution is added to each well. Only those wells that contain ANG-2, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm +/- 2 nm. The concentration of ANG-2 in the samples is then determined by comparing the O.D. of the samples to the standard curve.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	169646749
NCBI GeneID	285
NCBI Accession #	NP_001112359.1
NCBI GenBank Nucleotide #	NM_001118887.1
UniProt Accession #	O15123; Q9NRR7; Q9P2Y7; A0AV38; A8K205; B7ZLM7
Molecular Weight	56,919 Da
NCBI Official Full Name	angiopoietin-2 isoform b
NCBI Official Synonym Full Names	angiopoietin 2
NCBI Official Symbol	ANGPT2
NCBI Official Synonym Symbols	ANG2; AGPT2
NCBI Protein Information	angiopoietin-2; ANG-2; Tie2-ligand; angiopoietin-2B; angiopoietin-2a
UniProt Protein Name	Angiopoietin-2
UniProt Gene Name	ANGPT2
UniProt Synonym Gene Names	ANG-2
UniProt Entry Name	ANGP2_HUMAN

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/angpt2-human-elisa-kits/angiopoietin-2/80011>