

**Functional Angiopoietin-2 Antibody, mAb (recombinant) (blocking)**  
Catalog # ADP0006

**Specification**

**Functional Angiopoietin-2 Antibody, mAb (recombinant) (blocking) - Product Information**

Application  
Primary Accession  
Reactivity  
Host  
Clonality  
Isotype  
Gene Source  
Application Note

**E**  
[Q35608](#)  
**Human, Mouse**  
**CHO Cells**  
**Monoclonal**  
**Mouse IgG2b $\lambda$ .**  
**Human**  
**,E,Functional Appli**  
**cational,Inhibits**  
**the binding of**  
**mouse**  
**angiopoietin-2 to**  
**mouse Tie-2.**  
**ND50= 50-60ng/ml**  
**(for 10ng/ml of**  
**mouse Angiopoieti**  
**n-2) ,Inhibits the**  
**binding of human**  
**angiopoietin-2 to**  
**human Tie-2.**  
**ND50= 8-12ng/ml**  
**(for 10ng/ml of**  
**human Angiopoieti**  
**n-2) ,ND50 50%**  
**neutralizing dose**  
**of antibody for a**  
**given**  
**concentration of**  
**ligand (here**  
**Angiopoietin-2).**  
**56576**  
**anti-Angiopoietin-**  
**2, mAb (rec.)**  
**(blocking)**  
**(Angy-2-1) is**  
**composed of**  
**human variable**  
**regions (VH and**  
**VL) ( $\lambda$ -chain) of**  
**immunoglobulin**  
**fused to the**  
**mouse IgG2b Fc**  
**domain.**

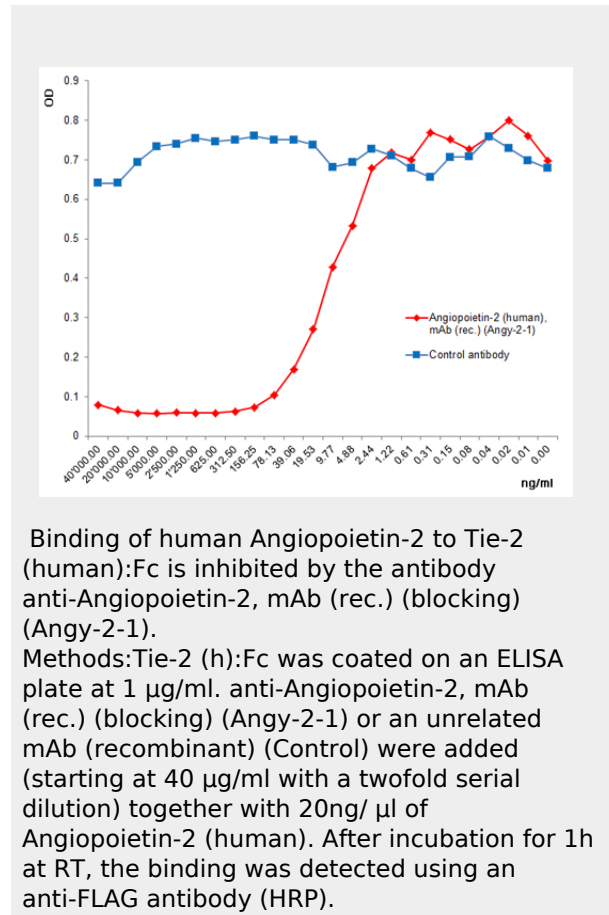
Calculated MW  
Description

**Functional Angiopoietin-2 Antibody, mAb (recombinant) (blocking) - Additional Information**

Gene ID 11601

**Other Names**

Ang-2; Ang2; Angpt2; Agpt2



Binding of human Angiopoietin-2 to Tie-2 (human):Fc is inhibited by the antibody anti-Angiopoietin-2, mAb (rec.) (blocking) (Angy-2-1).

Methods:Tie-2 (h):Fc was coated on an ELISA plate at 1  $\mu$ g/ml. anti-Angiopoietin-2, mAb (rec.) (blocking) (Angy-2-1) or an unrelated mAb (recombinant) (Control) were added (starting at 40  $\mu$ g/ml with a twofold serial dilution) together with 20ng/  $\mu$ l of Angiopoietin-2 (human). After incubation for 1h at RT, the binding was detected using an anti-FLAG antibody (HRP).

**Functional Angiopoietin-2 Antibody, mAb (recombinant) (blocking) - Background**

Angiopoietin-1 (Ang-1) and Angiopoietin-2 (Ang-2) are closely related secreted ligands which bind with similar affinity to Tie-2. Tie-2 and angiopoietins have been shown to play critical roles in embryogenic angiogenesis and in maintaining the integrity of the adult vasculature. Ang-1 activates Tie-2 signaling on endothelial cells to promote chemotaxis, cell survival, cell sprouting, vessel growth and stabilization. Ang-2 has been identified as a secreted protein ligand of Tie-2 and has alternatively been reported to be an antagonist for Ang-1 induced Tie-2 signaling as well as an agonist for Tie-2 signaling, depending on the cell context. anti-Angiopoietin-2, mAb (rec.) (blocking) (Angy-2-1) is an antibody developed by antibody phage display technology using a human naive antibody gene library. These libraries consist of scFv (single chain fragment variable) composed of VH (variable domain of the

**Target/Specificity**

Recognizes human and mouse angiotensin-2.  
Does not detect human angiotensin-1.

**Format**

Liquid. In PBS containing 10% glycerol and 0.02% sodium azide.

**Reconstitution & Storage**

Stable for at least 1 year after receipt when stored at -20°C.

**Precautions**

Functional Angiotensin-2 Antibody, mAb (recombinant) (blocking) is for research use only and not for use in diagnostic or therapeutic procedures.

human immunoglobulin heavy chain) and VL (variable domain of the human immunoglobulin light chain) connected by a polypeptide linker. The antibody fragments are displayed on the surface of filamentous bacteriophage (M13). This scFv was selected by affinity selection on antigen in a process termed panning. Multiple rounds of panning are performed to enrich for antigen-specific scFv-phage. Monoclonal antibodies are subsequently identified by screening after each round of selection. The selected monoclonal scFv is cloned into an appropriate vector containing a Fc portion of interest and then produced in mammalian cells to generate an IgG like scFv-Fc fusion protein.

**Functional Angiotensin-2 Antibody, mAb (recombinant) (blocking) - Protein Information**

**Name** Angpt2

**Synonyms** Agpt2

**Function**

Binds to TEK/TIE2, competing for the ANGPT1 binding site, and modulating ANGPT1 signaling. Can induce tyrosine phosphorylation of TEK/TIE2 in the absence of ANGPT1. In the absence of angiogenic inducers, such as VEGF, ANGPT2-mediated loosening of cell-matrix contacts may induce endothelial cell apoptosis with consequent vascular regression. In concert with VEGF, it may facilitate endothelial cell migration and proliferation, thus serving as a permissive angiogenic signal (By similarity).

**Cellular Location**

Secreted.

**Tissue Location**

Expressed only at sites of vascular remodeling.

**Functional Angiotensin-2 Antibody, mAb (recombinant) (blocking) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)