

ARG58614 anti-Prothrombin antibody

Package: 50 μl Store at: -20°C

Summary

| Product Description | Rabbit Polyclonal antibody recognizes Prothrombin |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Tested Reactivity | Rat |
| Predict Reactivity | Hu, Ms, Cow, Dog, Gpig, Hrs, Pig, Rb, Sheep |
| Tested Application | WB |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | lgG |
| Target Name | Prothrombin |
| Species | Rat |
| Immunogen | Synthetic peptide corresponding to a region of Rat Prothrombin. (within the following sequence: CQLWRSRYPHRPDINSTTHPGADLKENFCRNPDSSTSGPWCYTTDPTVRR) |
| Conjugation | Un-conjugated |
| Alternate Names | PT; EC 3.4.21.5; Prothrombin; THPH1; Coagulation factor II; RPRGL2 |
| | |

Application Instructions

| Predict Reactivity Note | 01 | Predicted homology based on immunogen sequence: Cow: 100%; Dog: 100%; Guinea Pig: 80%; Horse: 93%; Human: 100%; Mouse: 100%; Pig: 92%; Rabbit: 86%; Rat: 86%; Sheep: 93% | |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Application table | Application | Dilution | |
| | WB | 1 μg/ml | |
| Application Note | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. | | |
| Positive Control | Rat lung | | |

Properties

| Form | Liquid |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purification | Affinity purified. |
| Buffer | PBS, 0.09% (w/v) Sodium azide and 2% Sucrose. |
| Preservative | 0.09% (w/v) Sodium azide |
| Stabilizer | 2% Sucrose |
| Concentration | Batch dependent: 0.5 - 1 mg/ml |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed |

before use.

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

| Gene Symbol | F2 |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gene Full Name | coagulation factor II (thrombin) |
| Background | Coagulation factor II is proteolytically cleaved to form thrombin in the first step of the coagulation cascade which ultimately results in the stemming of blood loss. F2 also plays a role in maintaining vascular integrity during development and postnatal life. Peptides derived from the C-terminus of this protein have antimicrobial activity against E. coli and P. aeruginosa. Mutations in F2 lead to various forms of thrombosis and dysprothrombinemia. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2015] |
| Function | Thrombin, which cleaves bonds after Arg and Lys, converts fibrinogen to fibrin and activates factors V, VII, VIII, XIII, and, in complex with thrombomodulin, protein C. Functions in blood homeostasis, inflammation and wound healing. [UniProt] |
| Calculated Mw | 70 kDa |
| PTM | The gamma-carboxyglutamyl residues, which bind calcium ions, result from the carboxylation of glutamyl residues by a microsomal enzyme, the vitamin K-dependent carboxylase. The modified residues are necessary for the calcium-dependent interaction with a negatively charged phospholipid surface, which is essential for the conversion of prothrombin to thrombin. |
| | N-glycosylated. N-glycan heterogeneity at Asn-121: Hex3HexNAc3 (minor), Hex4HexNAc3 (minor) and Hex5HexNAc4 (major). At Asn-143: Hex4HexNAc3 (minor) and Hex5HexNAc4 (major). [UniProt] |

Images



ARG58614 anti-Prothrombin antibody WB image

Western blot: Rat lung lysate stained with ARG58614 anti-Prothrombin antibody at 1 $\mu g/ml$ dilution.