

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Atrial Natriuretic Peptide/ANP in direct ELISAs and Western blots. Does not detect ANF.
Source	Monoclonal Rat IgG _{2B} Clone # 361101
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Atrial Natriuretic Peptide/ANP
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Recombinant Human ANP
Immunohistochemistry	8-25 µg/mL	Immersion fixed paraffin-embedded sections of human prostate

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Atrial Natriuretic Peptide (ANP) is synthesized as a 151 aa preproprotein. The proprotein contains cardiodilatin (aa 26-92) and atrial natriuretic factor (ANF; aa 124-151) which become active after processing by the serine protease corin. ANP is primarily synthesized in the heart and is secreted in response to atrial distention. ANF circulates in the plasma, eliciting natriuretic, diuretic, vasorelaxant and antimitogenic effects directed toward reduction of body fluid and blood pressure regulation. ANF acts through the cGMP-coupled NP receptor A. Human ANP and ANF share 84% and 96% aa identity with mouse ANP and ANF, respectively.