



# Marker for Cardiovascular diseases (Hypertension) soluble (Pro)renin Receptor Assay Kit - IBL (96Well)

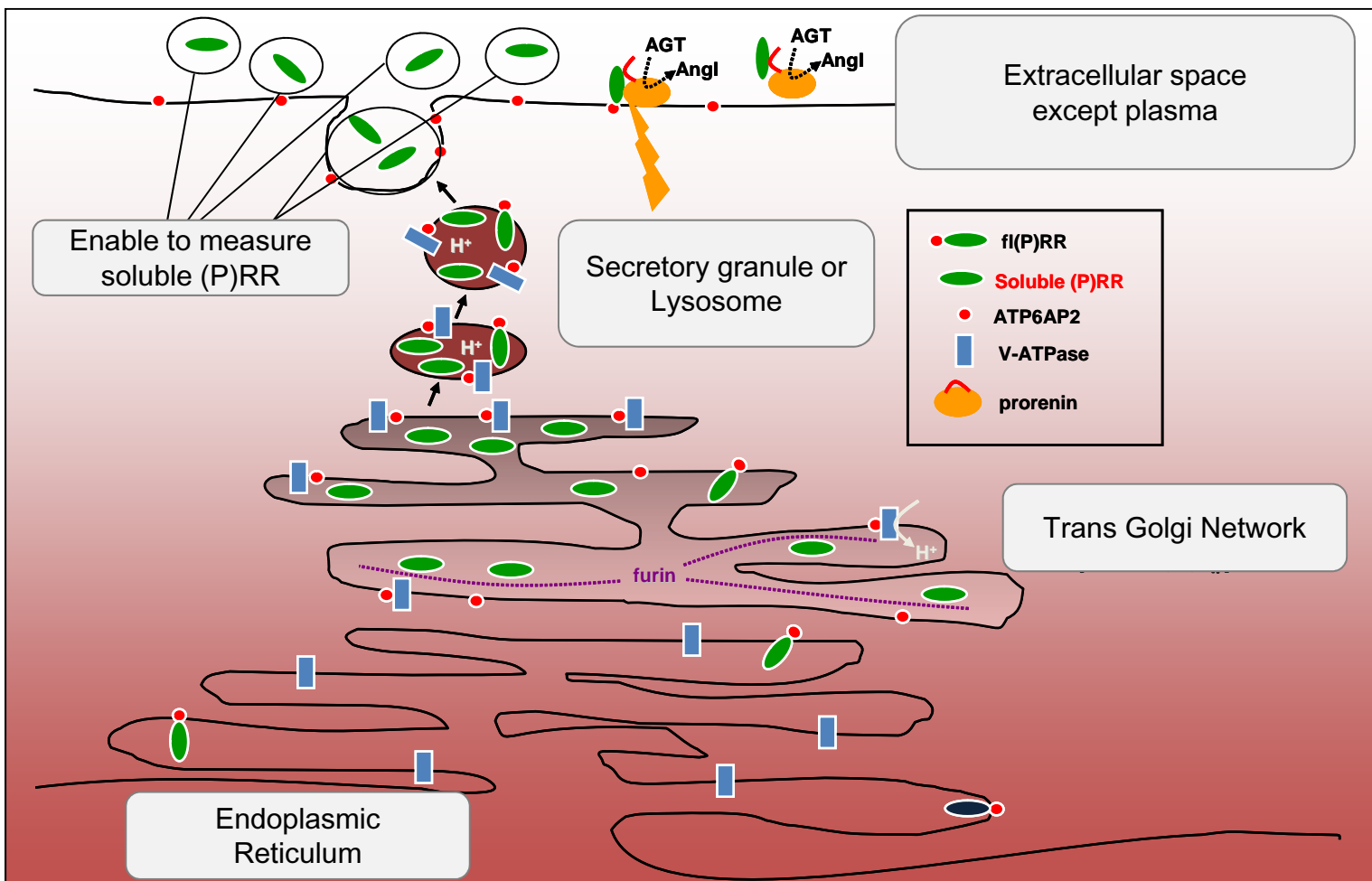
Measurement of concentration of (Pro)renin Receptor  
in Human, Mouse and Rat samples.

- Research Use Only -

Product No	Product name	Measurement range (ng/mL)	Measuring samples
27782	soluble (Pro)renin Receptor Assay Kit - IBL	125 – 8,000	Serum, EDTA-plasma, Urine, Cell Culture Supernatant (Human, Mouse, Rat)

(Pro)renin receptor/(P)RR is a common receptor protein between renin and prorenin. It has an ability as equivalent level as renin to bind angiotensinogen and a catalytic activity for conversion from angiotensinogen to angiotensin I once it binds to the (P)RR. Additionally, its intracellular signal transmission promotes once the (P)RR is stimulated by binding with prorenin.

From the fact, it is believed that (P)RR research is important for development of strategy for a new remedy which enable to suppress over activated tissue RAA (Renin-Angiotensin-Aldosterone) system. (P)RR is a 39 kDa, single transmembrane receptor protein and it is reported that it generates 29 kDa soluble form cleaved by furin. Thus the quantitative assay of soluble (P)RR in blood or urine samples is expected to contribute a new perception for clarification of disease mechanisms and development of new tools for diseases. This assay kit enable to measure concentration of soluble (Pro)renin receptor in human, mouse and rat blood or urine samples.



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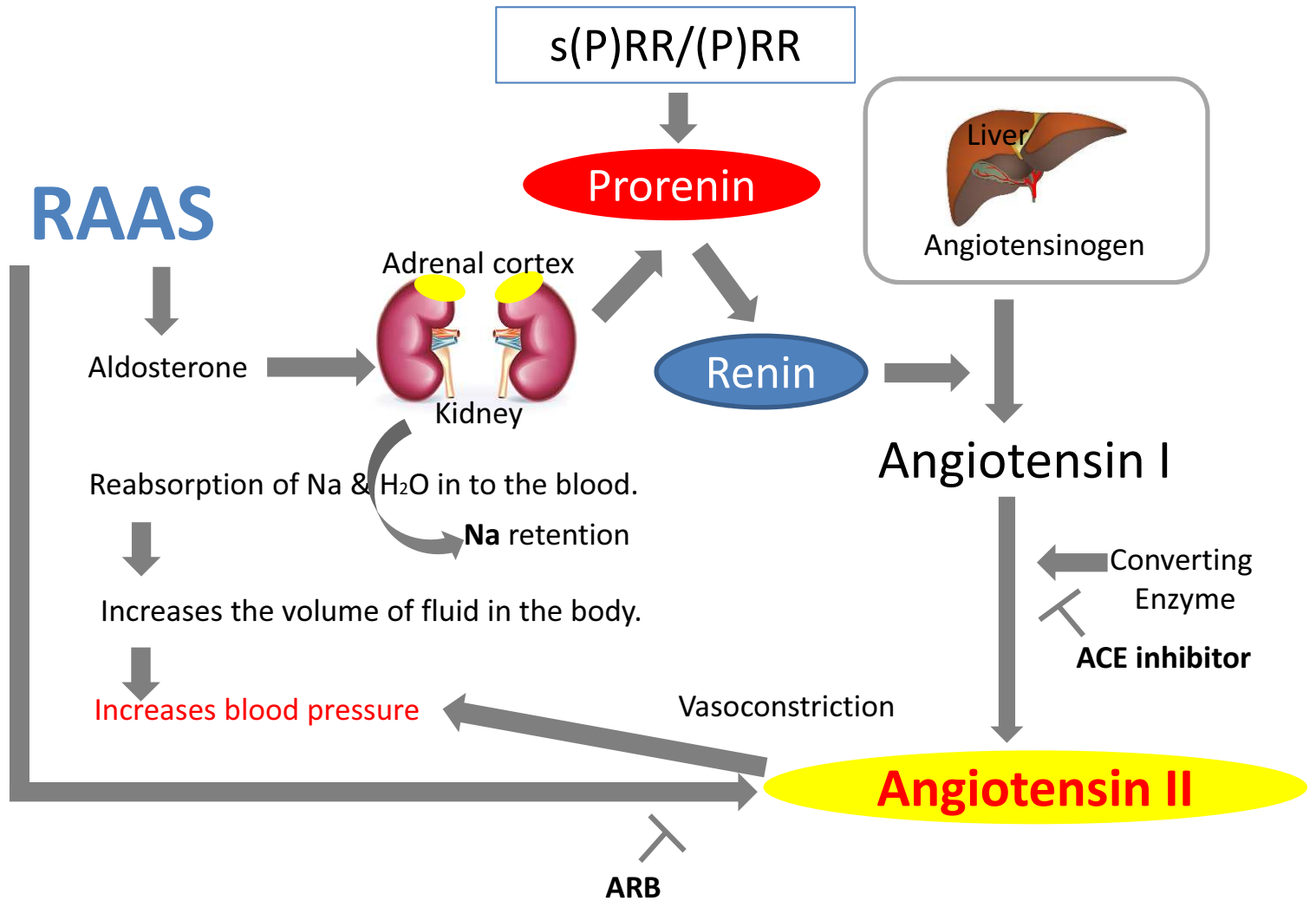


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## (Renin-Angiotensin-Aldosterone System; RAAS)



### 参考文献

1. Maruyama N, Segawa T, Kinoshita N, Ichihara A. Novel sandwich ELISA for detecting the human soluble (pro)renin receptor. 投稿中
2. Nguyen G, Delarue F, Burcklé C, Bouzahir L, Giller T, Sraer JD. Pivotal role of the renin/prorenin receptor in angiotensin II production and cellular responses to renin. *J Clin Invest.* 2002 Jun;109(11):1417-27.
3. Ichihara A, Hayashi M, Kaneshiro Y, Suzuki F, Nakagawa T, Tada Y, Koura Y, Nishiyama A, Okada H, Uddin MN, Nabi AH, Ishida Y, Inagami T, Saruta T. Inhibition of diabetic nephropathy by a decoy peptide corresponding to the "handle" region for nonproteolytic activation of prorenin. *J Clin Invest.* 2004 Oct;114(8):1128-35.
4. Cousin C, Bracquart D, Contrepas A, Corvol P, Muller L, Nguyen G. Soluble form of the (pro)renin receptor generated by intracellular cleavage by furin is secreted in plasma. *Hypertension.* 2009 Jun;53(6):1077-82.
5. Cruciat CM, Ohkawara B, Acebron SP, Karaulanov E, Reinhard C, Ingelfinger D, Boutros M, Niehrs C. Requirement of prorenin receptor and vacuolar H<sup>+</sup>-ATPase-mediated acidification for Wnt signaling. *Science.* 2010 Jan 22;327(5964):459-63.
6. Kinouchi K, Ichihara A, Sano M, Sun-Wada GH, Wada Y, Kurauchi-Mito A, Bokuda K, Narita T, Oshima Y, Sakoda M, Tamai Y, Sato H, Fukuda K, Itoh H. The (pro)renin receptor/ATP6AP2 is essential for vacuolar H<sup>+</sup>-ATPase assembly in murine cardiomyocytes. *Circ Res.* 2010 Jul 9;107(1):30-4.