



Human ANGPTL 2 Assay Kit

- A New Biomarker of Heart Disease -

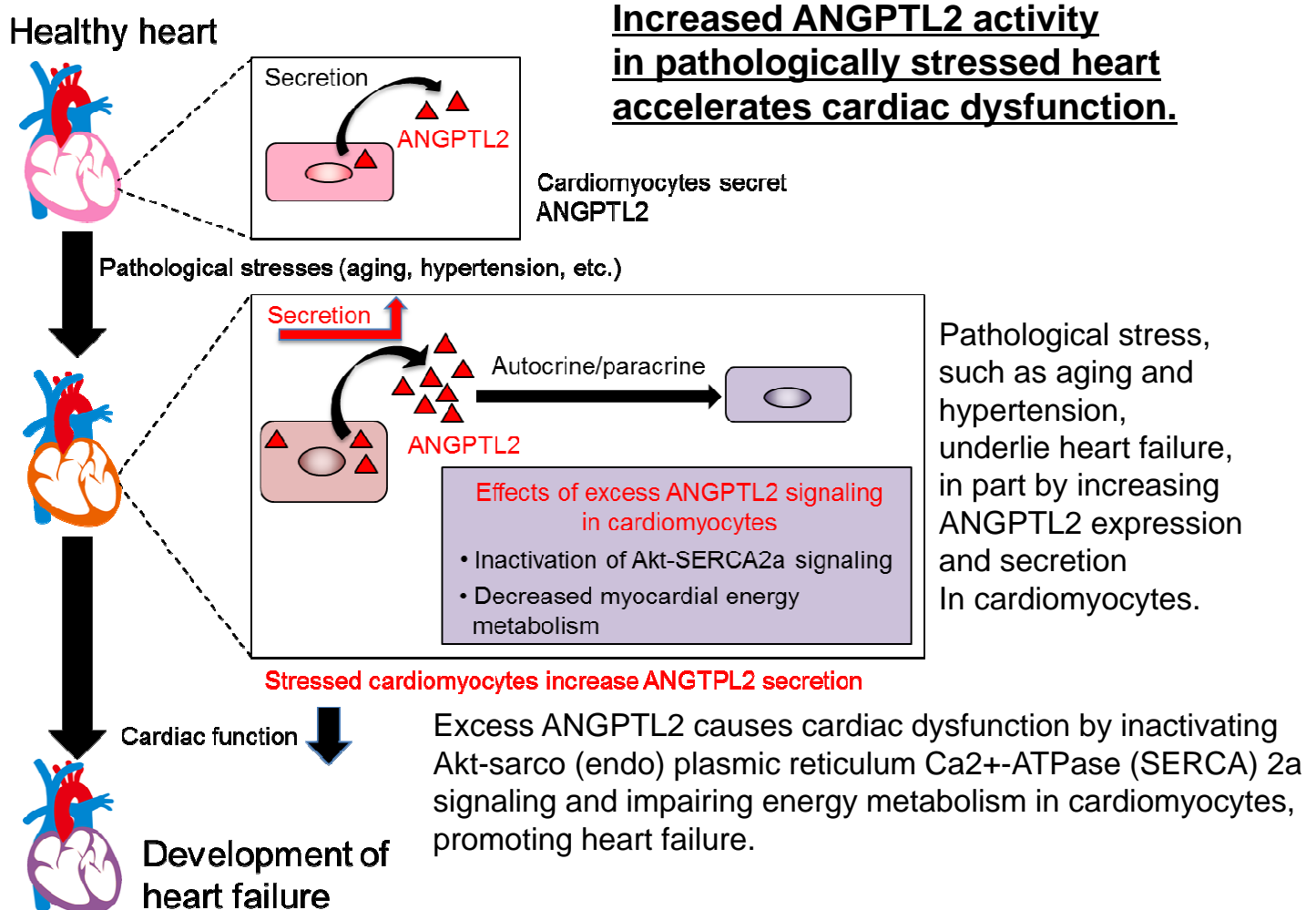
- Research Use Only -

Angiopoietin-like proteins (ANGPTLs) are secretory form proteins and 7 ANGPTLs were identified. ANGPTL2 was found to affect vascular cells and monocytes, and it have also been known that ANGPTL3 and ANGPTL4 play important roles in lipid metabolism and AGF (Angiopoietin-like growth factor)/ANGPTL6 plays in energy metabolism. These various biological effects of ANGPTL family are attracting attention as a new target of strategy against lifestyle-related diseases like metabolic syndrome or cancer.

There is a report that high level of ANGPTL2 in blood was observed in individuals with adiposity, strong insulin resistance, diabetes and arteriosclerosis.

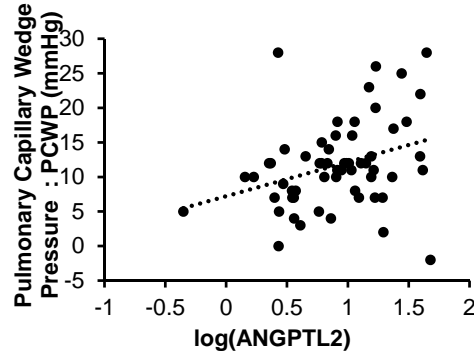
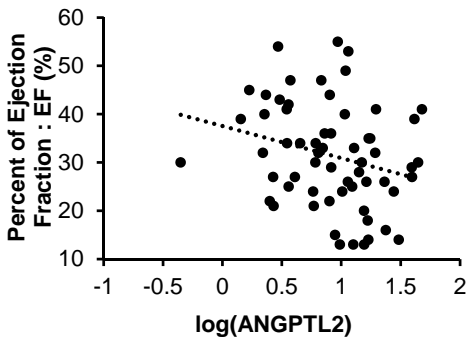
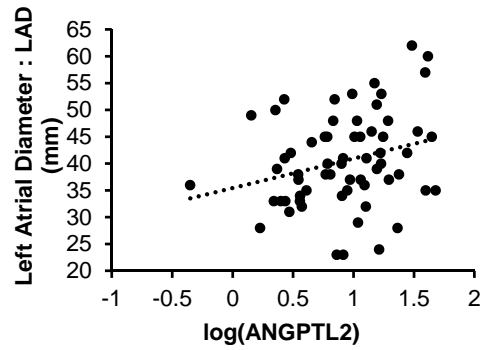
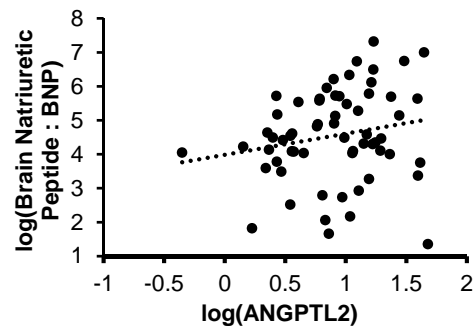
It is also considered that ANGPTL2 autocrine/paracrine signaling can be a new factor in accelerating heart disease development in the aging.

This kit is a quantitative ELISA kit which can measure ANGPTL2 concentration in human serum or plasma.

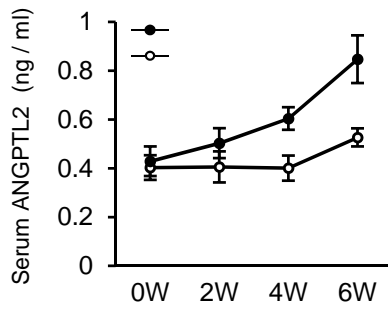


* Cited and modified from Oike et al (Reference 2)

Relationship of circulating ANGPTL2 levels to heart failure associated clinical parameters



Circulating ANGPTL2 levels increase in mice following transverse aorta constriction (TAC) surgery.



ELISA for circulating ANGPTL2 protein before surgery and at 2, 4, and 6 weeks after surgery in sham and TAC-operated WT mice .

* Cited and modified from Tian et al (Reference 1)

Reference:

- 1) Circulating ANGPTL2 Levels Increase in Humans and Mice Exhibiting Cardiac Dysfunction.
Tian Z, Miyata K, Morinaga J, Horiguchi H, Kadomatsu T, Endo M, Zhao J, Zhu S, Sugizaki T, Sato M, Terada K, Okumura T, Murohara T, Oike Y. *Circ J.* 2017 Sep 8. PMID:28890470
- 2) ANGPTL2 - A New Causal Player in Accelerating Heart Disease Development in the Aging.
Oike Y, Tian Z, Miyata K, Morinaga J, Endo M, Kadomatsu T. *Circ J.* 2017 Sep 25;81(10):1379-1385. PMID:28867689

Human ANGPTL2 Assay Kit – IBL and related products

Code	Sample type	Product Name	Volume	Measurement Range	Measuring samples				
					Serum	EDTA-Plasma	Urine	CSF	Culture Sup
27745	H, M	Human ANGPTL2 Assay Kit – IBL	96 well	0.05 – 3.5 ng/mL	○	○	△	△	○
27750	H	Human ANGPTL3 (highly sensitive) Assay Kit – IBL	96 well	0.47 – 30 ng/mL	○	○	△	△	○
27749	H	Human ANGPTL4 Assay Kit – IBL	96 well	23.44 – 1500 pg/mL	○	○	△	△	○
27410	M	Mouse angiopoietin-like 3 Assay Kit – IBL	96 well	0.31 – 20 ng/mL	○	○	△	△	○