Other raw materials

Introduction

This series of biomarkers includes small-molecules that do not fall into the aforementioned categories but are closely associated with human, animal and environmental health. Examples include angiotensin I/II for the diagnosis of hypertension and cardiovascular-cerebrovascular diseases, cholyglycine for identifying abnormal hepatobiliary function, 5-hydroxyindoleacetic acid for the auxiliary diagnosis of neuroendocrine tumors, and 11-dehydrothromboxane B2 for monitoring aspirin resistance.
Some products applicable for development of IVD reagents are also classified under this category, such as dinitrophenol and its antibody, which serve as quality control materials in quantitative immunochromatography.

Products

Other raw materials	Conjugate	Antibody
Angiotensin I (AI)	√	√
Angiotensin II (AII)	√	√
Cholyglycine	√	√
11-Dehydrothromboxane B2	√	√
Dinitrophenol	√	√
5-Hydroxyindoleacetic Acid	√	√
Homocysteine	√	

Other raw materials

Angiotensin I (AI)

Renin is an enzyme (EC 3.4.99.19) secreted from the juxtaglomerular cells of the kidney, it acts on the angiotensinogen to release angiotensin I (AI), a physiologically inactive decapeptide. This in turn is converted to angiotensin II, a potent vasoconstrictor that stimulates release of aldosterone. The overall effect is an increase in blood pressure. Renin is the limiting enzyme in the formation of angiotensin II and in the biological activity of the renin-angiotensin-aldosterone system. Plasma renin activity (PRA) can be assessed by incubating samples under appropriate conditions and measuring the concentration of AI liberated from the endogenous substrate angiotensinogen. Determination of PRA under different conditions of suppression and stimulation is useful for differentiating primary from secondary hyperaldosteronism, for subdividing hypertensive patients into different treatment protocols, and for screening patients to identify those with unilateral hypertension. Accurate quantification of AI is a prerequisite for accurate assessment of PRA. Our anti-AI McAb can be applied to establish sensitive immunoassay for determination of the AI levels in plasma.

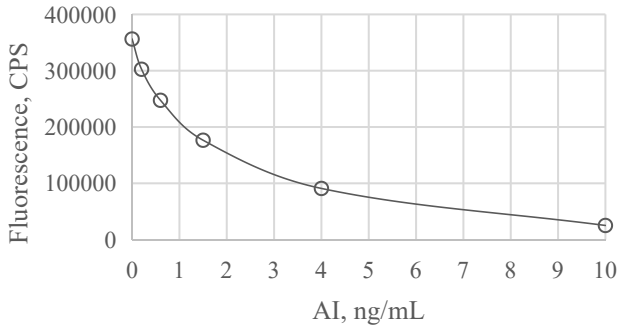

Fig. 2. The typical calibration curve of AI-DELFIA using McAb-1934

Product Type	Catalog #	Description
Mouse monoclonal antibody	• Anti-AI McAb-1934	LOD < 0.03ng/mL by DELFIA using McAb-1934. The cross-reaction is < 1.6% with angiotensin II (AII).
Conjugate	• AI-PEG-Biotin	Paired with anti-AI antibodies for AI determination.

Other raw materials

Angiotensin II (AII)

Angiotensin II (AII) is an octapeptide (Asp1-Arg2-Val3-Tyr4-Ile5-His6-Pro7-Phe8) with potent vasoconstrictor properties. AII is formed by cleavage of a dipeptide from the carboxy-terminus of angiotensin I (AI). As the active component of the renin-angiotensin system, AII causes vasoconstriction and increases arterial pressure by binding to angiotensin II type 1 receptors. Moreover, angiotensin II stimulates the secretion of aldosterone, which causes an increase in sodium levels and fluid retention. All of these events can cause hypertension, left ventricular hypertrophy, and heart failure. Accordingly, accurate monitoring of the levels of angiotensin II in plasma is important for the management of hypertension and heart diseases. Our anti-AII McAb can be used to establish sensitive immunoassay for determination of the AII levels in plasma.

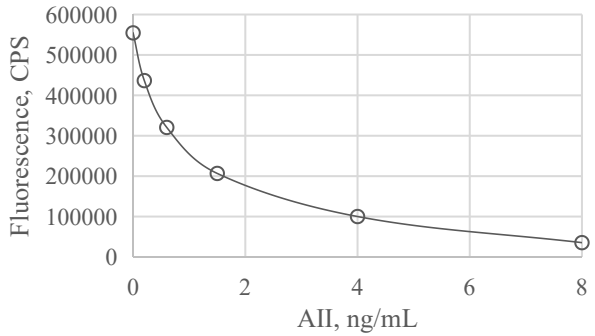

Fig. 2. The typical calibration curve of AII-DELFIA using McAb-3241

Product Type	Catalog #	Description
Mouse monoclonal antibody	• Anti-AII McAb-3241	LOD < 0.02ng/mL by DELFIA using McAb-3241. The cross-reaction is < 3.2% with angiotensin I (AI).
Conjugate	• AII-PEG-Biotin	Paired with anti-AII antibodies for AII determination.