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알도스테론 민감성 신장 피질 막에서의 총체적 인산화단백체 연구

경북대학교 의과대학 분자의학교실[1], 경북대학교 의과대학 생호학세포생물학교실[2]

김혜정[1] · 이정은[1] · 박자혜[1] · 최효정[2] · 권태환[2] · 백문창[1]

Global Phosphoproteome Study in Aldosterone-sensitive Kidney Cortex Membrane

Hye-Jeong Kim[1], Jeong-Eun Lee[1], Ja-Hye Park[1], Hye-Jeong Choi[2], Tae-Hwan Kwon[2] and Moon-Chang Baek[1]

[1]Kyungpook National University School of Medicine Department of Molecular Medicine,
[2]Kyungpook National University School of Medicine Department of biochemistry and cell biology

Cell signaling mechanism often transmit information via posttranslational protein modifications, most importantly reversible protein phosphorylation. In this study, we investigated phospholyation event triggered by aldosterone in rat kidney cortex membrane. We optimized the condition for SIMAC method which is simple and rapid strategy for efficient detecting of rat kidney cortex membrane by aldosterone. Global analyses of protein phosphorylation require specific enrichment methods because of the typically low abundance of phosphoproteins.For quantification method using mass spectrometry, we established label free quantification method which uses protein expression systems (Waters Co.). Finally we would show a number of proteins that significantly changed in phosphorylation state in response to aldosterone treatment and show phosphorylation sites in proteins identified. This will be the first research to show total phosphoproteins changed in kidney membrane affected by aldosterone.

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Key Words : 알도스테론, 인산화펩타이드, 사이멕
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