



ABCC6 is a basolateral plasma membrane protein

Submitted by Emmanuel Lemoine on Tue, 02/24/2015 - 15:21

Titre	ABCC6 is a basolateral plasma membrane protein
Type de publication	Article de revue
Auteur	Pomozi, V. [1], Le Saux, Olivier [2], Brampton, C. N [3], Apana, A. [4], Ilias, A. [5], Szeri, F. [6], Martin, Ludovic [7], Monostory, K. [8], Paku, S. [9], Sarkadi, B. [10], Szakacs, G. [11], Varadi, A. [12]
Editeur	American Heart Association
Type	Article scientifique dans une revue à comité de lecture
Année	2013
Langue	Anglais
Date	2013
Numéro	11
Pagination	e148 - 51
Volume	112
Titre de la revue	Circulation research
ISSN	1524-4571
Mots-clés	Animals [13], ATP-Binding Cassette Transporters/genetics/metabolism [14], Biological Markers/metabolism [15], Cell Membrane/metabolism [16], Cell Polarity/physiology [17], Endoplasmic Reticulum/metabolism [18], Fluorescent Antibody Technique [19], Hepatocytes/metabolism [20], Humans [21], Mice [22], Mice, Inbred C57BL [23], Mice, Knockout [24], Mitochondria/metabolism [25], Multidrug Resistance-Associated Proteins/genetics/metabolism [26], Sodium-Potassium-Exchanging ATPase/metabolism [27]
Résumé en anglais	<p>RATIONALE: ABCC6 plays a crucial role in ectopic calcification; mutations of the gene cause pseudoxanthoma elasticum and general arterial calcification of infancy. To elucidate the role of ABCC6 in cellular physiology and disease, it is crucial to establish the exact subcellular localization of the native ABCC6 protein. OBJECTIVE: In a recent article in Circulation Research, ABCC6 was reported to localize to the mitochondria-associated membrane and not the plasma membrane. As the suggested mitochondrial localization is inconsistent with published data and the presumed role of ABCC6, we performed experiments to determine the cellular localization of ABCC6 in its physiological environment. METHODS AND RESULTS: We performed immunofluorescent labeling of frozen mouse and human liver sections, as well as primary hepatocytes. We used several different antibodies recognizing human and mouse ABCC6. Our results unequivocally show that ABCC6 is in the basolateral membrane of hepatocytes and is not associated with the mitochondria, mitochondria-associated membrane, or the endoplasmic reticulum. CONCLUSIONS: Our findings support the model that ABCC6 is in the basolateral membrane, mediating the sinusoidal efflux of a metabolite from the hepatocytes to systemic circulation.</p>
URL de la notice	http://okina.univ-angers.fr/publications/ua8151 [28]
DOI	10.1161/CIRCRESAHA.111.300194 [29]

Lien vers le document <http://dx.doi.org/10.1161/CIRCRESAHA.111.300194> [29]
Titre abrégé Circ Res

Liens

- [1] [http://okina.univ-angers.fr/publications?f\[author\]=13398](http://okina.univ-angers.fr/publications?f[author]=13398)
- [2] [http://okina.univ-angers.fr/publications?f\[author\]=987](http://okina.univ-angers.fr/publications?f[author]=987)
- [3] [http://okina.univ-angers.fr/publications?f\[author\]=15025](http://okina.univ-angers.fr/publications?f[author]=15025)
- [4] [http://okina.univ-angers.fr/publications?f\[author\]=13401](http://okina.univ-angers.fr/publications?f[author]=13401)
- [5] [http://okina.univ-angers.fr/publications?f\[author\]=13402](http://okina.univ-angers.fr/publications?f[author]=13402)
- [6] [http://okina.univ-angers.fr/publications?f\[author\]=13403](http://okina.univ-angers.fr/publications?f[author]=13403)
- [7] <http://okina.univ-angers.fr/ludovic.martin/publications>
- [8] [http://okina.univ-angers.fr/publications?f\[author\]=13405](http://okina.univ-angers.fr/publications?f[author]=13405)
- [9] [http://okina.univ-angers.fr/publications?f\[author\]=13406](http://okina.univ-angers.fr/publications?f[author]=13406)
- [10] [http://okina.univ-angers.fr/publications?f\[author\]=13407](http://okina.univ-angers.fr/publications?f[author]=13407)
- [11] [http://okina.univ-angers.fr/publications?f\[author\]=13408](http://okina.univ-angers.fr/publications?f[author]=13408)
- [12] [http://okina.univ-angers.fr/publications?f\[author\]=13409](http://okina.univ-angers.fr/publications?f[author]=13409)
- [13] [http://okina.univ-angers.fr/publications?f\[keyword\]=964](http://okina.univ-angers.fr/publications?f[keyword]=964)
- [14] [http://okina.univ-angers.fr/publications?f\[keyword\]=12724](http://okina.univ-angers.fr/publications?f[keyword]=12724)
- [15] [http://okina.univ-angers.fr/publications?f\[keyword\]=12725](http://okina.univ-angers.fr/publications?f[keyword]=12725)
- [16] [http://okina.univ-angers.fr/publications?f\[keyword\]=12726](http://okina.univ-angers.fr/publications?f[keyword]=12726)
- [17] [http://okina.univ-angers.fr/publications?f\[keyword\]=12727](http://okina.univ-angers.fr/publications?f[keyword]=12727)
- [18] [http://okina.univ-angers.fr/publications?f\[keyword\]=12728](http://okina.univ-angers.fr/publications?f[keyword]=12728)
- [19] [http://okina.univ-angers.fr/publications?f\[keyword\]=7844](http://okina.univ-angers.fr/publications?f[keyword]=7844)
- [20] [http://okina.univ-angers.fr/publications?f\[keyword\]=12729](http://okina.univ-angers.fr/publications?f[keyword]=12729)
- [21] [http://okina.univ-angers.fr/publications?f\[keyword\]=991](http://okina.univ-angers.fr/publications?f[keyword]=991)
- [22] [http://okina.univ-angers.fr/publications?f\[keyword\]=1102](http://okina.univ-angers.fr/publications?f[keyword]=1102)
- [23] [http://okina.univ-angers.fr/publications?f\[keyword\]=1478](http://okina.univ-angers.fr/publications?f[keyword]=1478)
- [24] [http://okina.univ-angers.fr/publications?f\[keyword\]=1147](http://okina.univ-angers.fr/publications?f[keyword]=1147)
- [25] [http://okina.univ-angers.fr/publications?f\[keyword\]=12730](http://okina.univ-angers.fr/publications?f[keyword]=12730)
- [26] [http://okina.univ-angers.fr/publications?f\[keyword\]=12731](http://okina.univ-angers.fr/publications?f[keyword]=12731)
- [27] [http://okina.univ-angers.fr/publications?f\[keyword\]=12732](http://okina.univ-angers.fr/publications?f[keyword]=12732)
- [28] <http://okina.univ-angers.fr/publications/ua8151>
- [29] <http://dx.doi.org/10.1161/CIRCRESAHA.111.300194>

Publié sur *Okina* (<http://okina.univ-angers.fr>)