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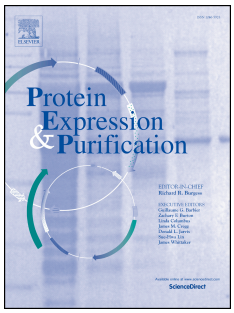

Expression, purification, and characterisation of human soluble Epoxide Hydrolase (hsEH), and of its functional C-terminal domain

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Expression, purification, and characterisation of human soluble Epoxide Hydrolase (hsEH), and of its functional C-terminal Domain

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Highlights

- hsEH is a key regulator of cardiovascular homeostasis
- A HEK293-F mammalian expression system for hsEH full-length (FL) was developed
- An *E. coli* expression system for the hsEH C-terminal Domain (CTD) was established
- Both proteins exhibited the same enzymatic specific activity *in vitro*
- The CTD preparation provides benefits of easy operation, and high yield and purity

Keywords

Soluble epoxide hydrolase

Escherichia coli

Human embryonic kidney 293 free cells

Recombinant expression

C-terminal domain

Abbreviations

EETs (epoxieicosatrienoic acids), AR9281 (1-(1-acetylpiperidin-4-yl)-3-adamantan-1-ylurea), AUDA (12-[[(tricyclo[3.3.1.13,7]dec-1-ylamino)carbonyl]amino]-dodecanoic acid), GSK2256294 ((1R,3S)-N-(4-cyano-2-(trifluoromethyl)benzyl)-3-((4-methyl-6-(methylamino)-1,3,5-triazin-2-yl)amino)cyclohexanecarboxamide), PHOME (3-phenyl-cyano(6-methoxy-2-naphthalenyl) methyl ester-2-oxiraneacetic acid), 6M2N (6-methoxy-2-