

Table 1

CELLULAR SYSTEM	COMPOUND	CONCENTRATION	GJIC	MECHANISM	REFERENCE
Mercury					
Primary rat osteoblast-like cells	Hg (elemental)	5 μ M	~		(39)
Primary human keratinocytes	HgCl ₂	0.01 μ M	↓	oxidative stress	(40-43)
Chinese hamster V79 cells	HgCl ₂	2-3 μ M	↓		(57)
Madin-Darby canine kidney cells	HgCl ₂	0.1-50 μ M	↓	↓ glutathione peroxidase/catalase activity	(35)
Primary rat renal epithelial cells	CH ₃ Hg	30 μ M	↓	↑ intracellular Ca ²⁺ concentration	(38)
Primary rat osteoblast-like cells	CH ₃ Hg	1-10 μ M	↓	↑ intracellular Ca ²⁺ concentration	(39)
Primary human keratinocytes	CH ₃ Hg	0.25 μ M	↓		(40)
Primary human keratinocytes	(CH ₃) ₂ Hg	250-500 μ M	~		(40)
Cadmium					
Mouse liver	CdCl ₂	5-60 μ M/kg*	↓	↓ Cx26/Cx32 expression	(45)
Rat liver WB-F344 epithelial cells	CdCl ₂	0.03-200 μ M**	↓	↓ Cx43 expression	(48)
Primary rat renal epithelial cells	CdCl ₂	100 μ M	↓	↑ intracellular Ca ²⁺ concentration	(44)
Chinese hamster V79 cells	CdCl ₂	1-6 μ M	~		(57)
Chinese hamster V79 cells	Cd(NO ₃) ₂	1.06 μ M	↓		(59)
Syrian hamster embryo cells	Cd(C ₂ H ₃ O ₂) ₂	110 μ M	↓		(58)
Arsenic					
Human aortic endothelial cells	As ₂ O ₃	0.05-5 μ M	↓	↓ Cx43 expression	(53)
Chinese hamster V79 cells	H ₃ AsO ₄	5-10 μ M	↓		(57)
Aluminium					
Primary rat astroglial cells	C ₉ H ₁₅ AlO ₉	340 μ M	↓	↓ Cx43 trafficking	(56)
Lead					
Primary rat osteoblast-like cells	Pb (elemental)	5 μ M	~		(39)
Chinese hamster V79 cells	Pb(C ₂ H ₃ O ₂) ₂	50-500 μ M	↓		(57)
Syrian hamster embryo cells	Pb(C ₂ H ₃ O ₂) ₂	2600 μ M	~		(58)
Primary rat astroglial cells	Pb(C ₂ H ₃ O ₂) ₂	0.1-1 μ M	~		(76)
Primary human keratinocytes	Pb(C ₂ H ₃ O ₂) ₂	not specified	~		(40)
Nickel					
Syrian hamster embryo cells	NiSO ₄	500-3500 μ M	↓		(58)
Chinese hamster V79 cells	NiCl ₂	75 μ M	↓		(57)

Vanadium				
Chinese hamster V79 cells	Na ₃ VO ₄	5.4-21.6 μM	↓	(59)
Syrian hamster embryo cells	Na ₃ VO ₄	19 μM	~	(60)
Syrian hamster embryo cells	Na ₃ VO ₃	1-1000 μM	~	(77)
Syrian hamster embryo cells	VO ₂ SO ₄ ·5H ₂ O	1-1000 μM	~	(77)
Syrian hamster embryo cells	NH ₄ VO ₃	1-1000 μM	~	(77)
Chinese hamster V79 cells	VOCl ₂	not specified	~	(59)
Indium				
Primary rat hepatocytes	InCl ₃	100-1000 μM	↓	(61)