



M Ű E G Y E T E M 1 7 8 2



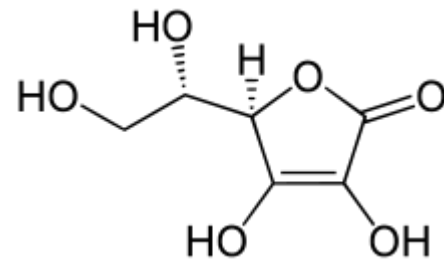
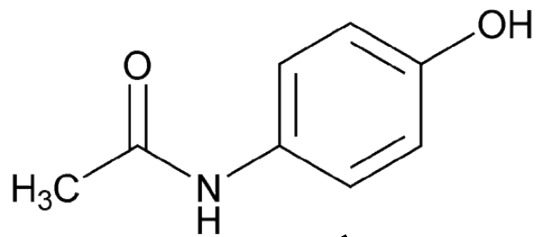
A nagydózisú aszkorbát és acetaminofen kiváltotta sejthalál kulcsfehérjéinek vizsgálata

Szarka András



MEDINPROT

**X. MedInProt Konferencia
2018. November 10.**



**Nekroptózis,
Apoptózis,
Autofágia**

Ferroptózis?

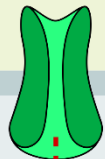
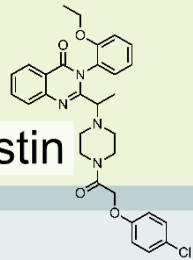
**Apoptózis,
Autofágia**

Sejthalál



Ferroptózis gyorstalpaló

cisztin-
transzport



GSH
bioszint.

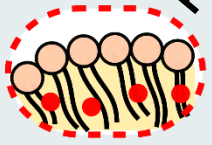
Ferroptózis

cGSH ↓

ROS ↑



LIP ↑



LOOX ↑



citoszol

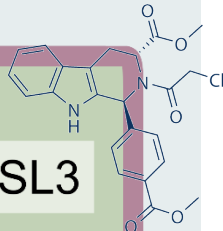
mETC

ROS ↑

mGSH ↓

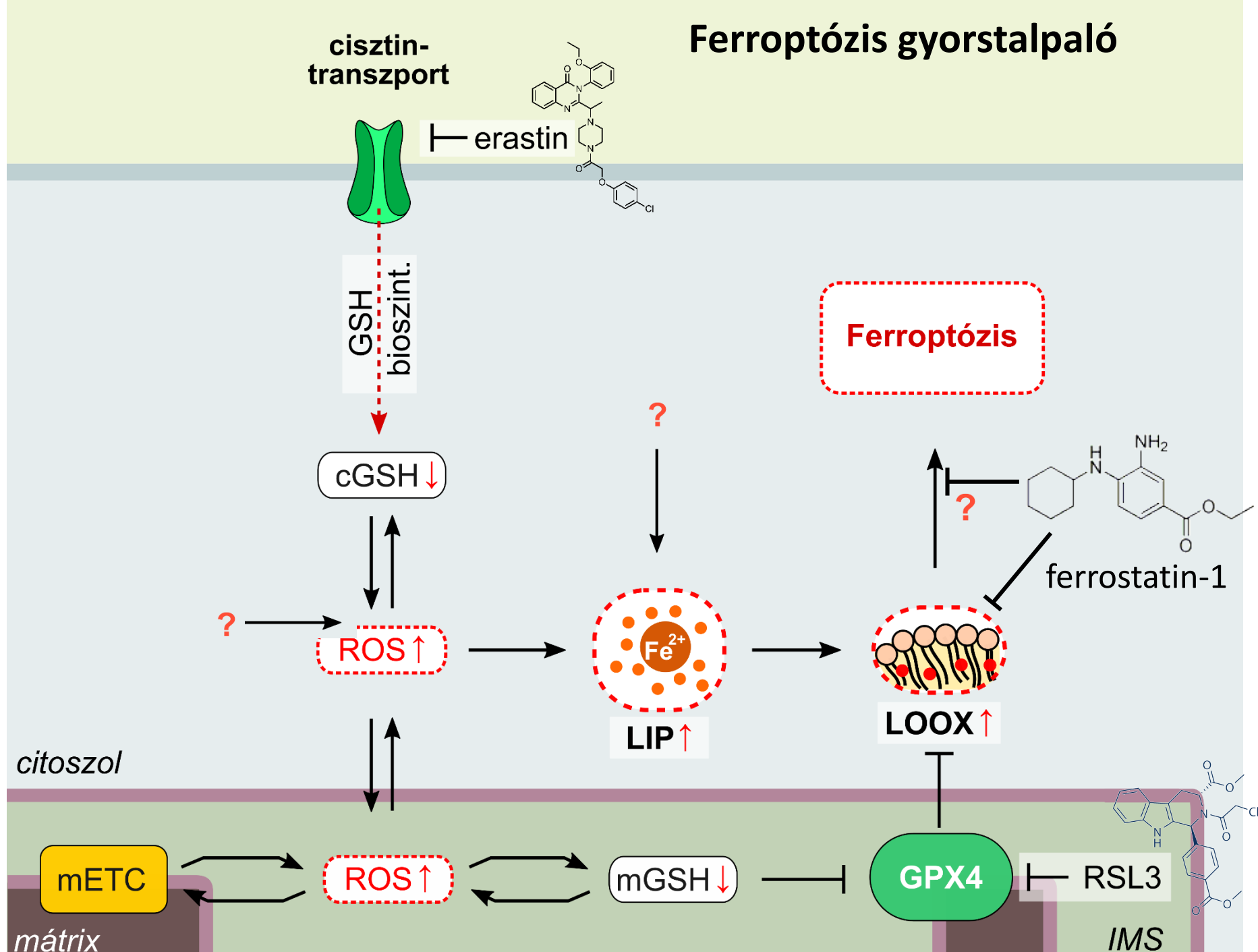
GPX4

RSL3

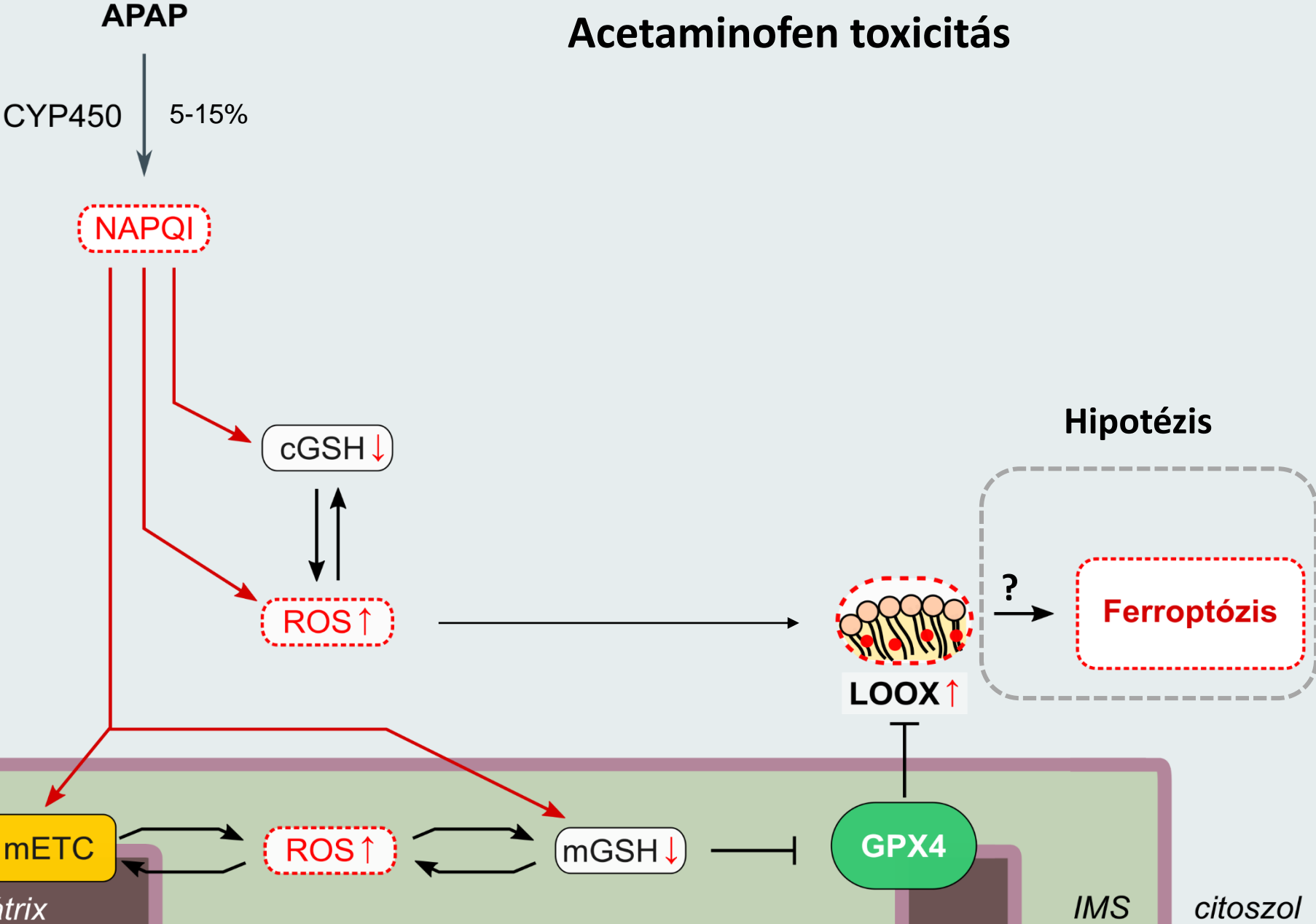


mátrix

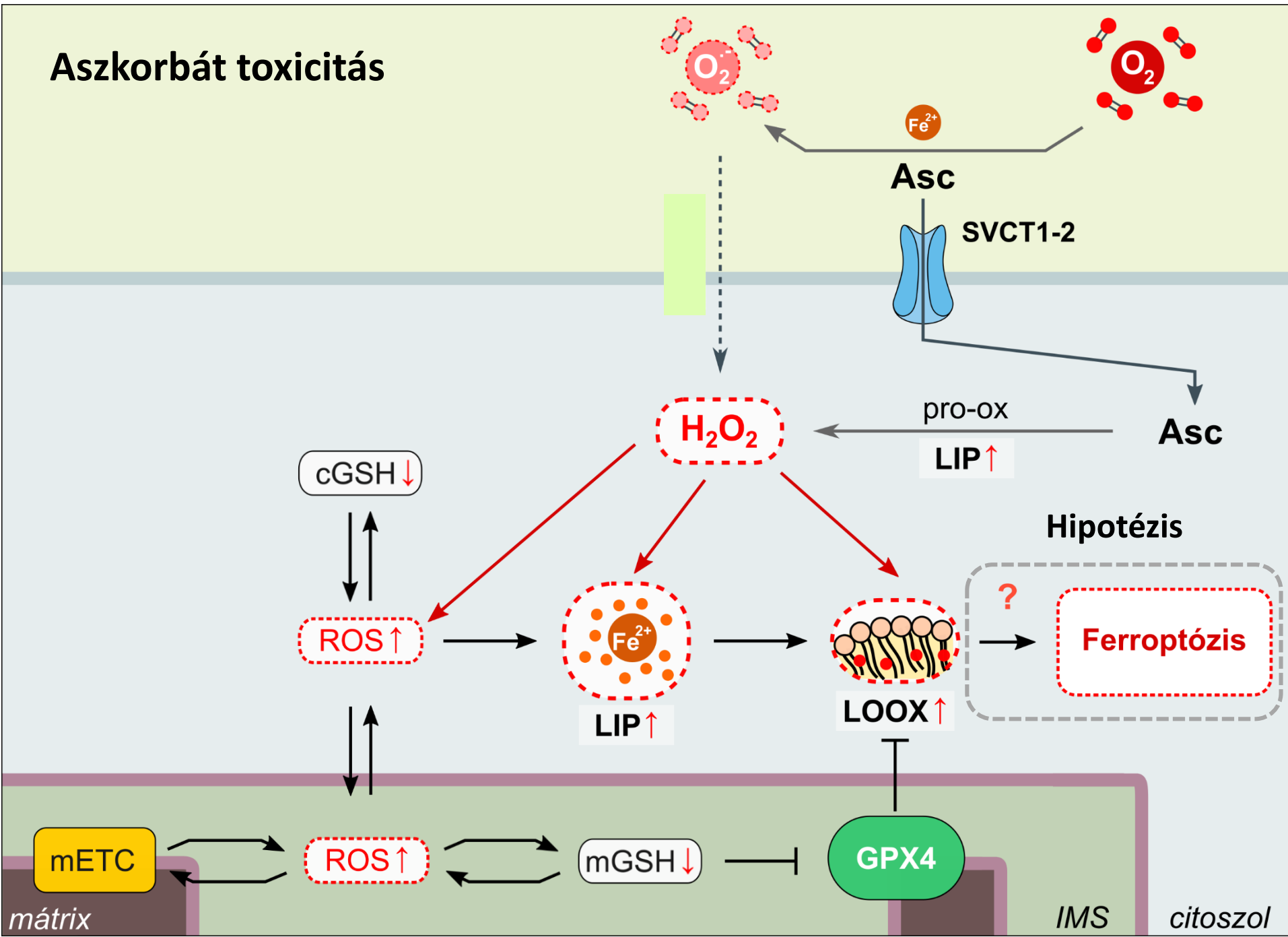
IMS



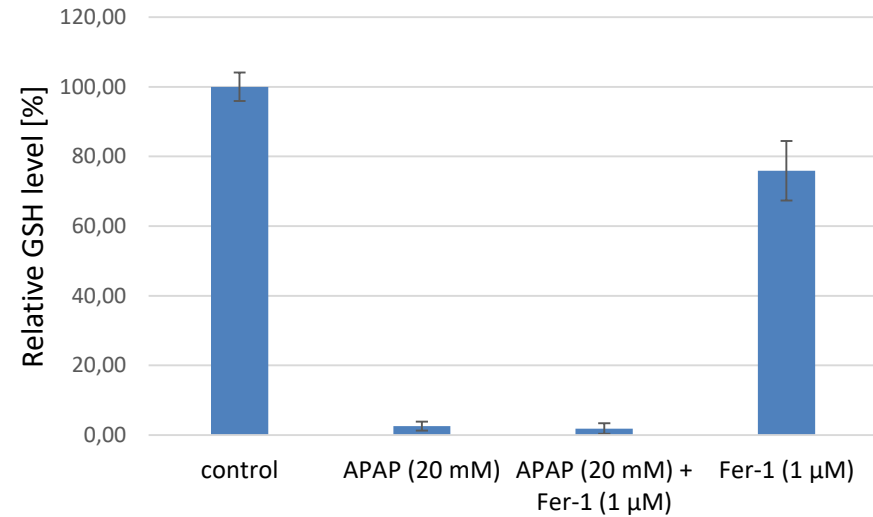
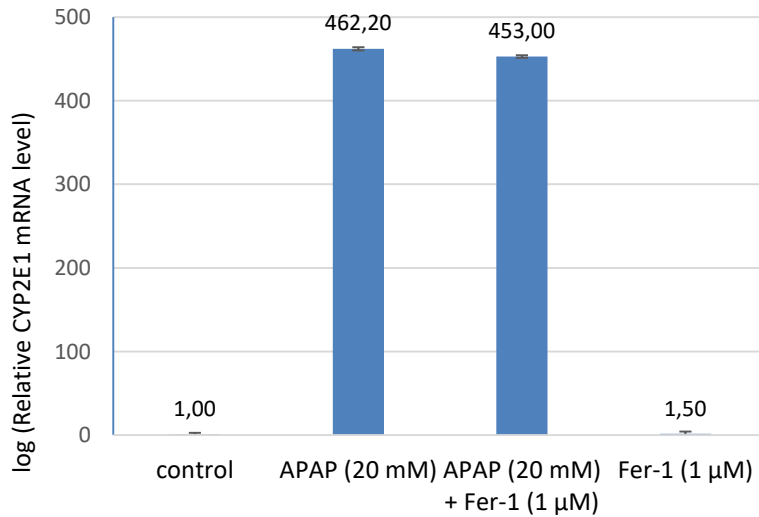
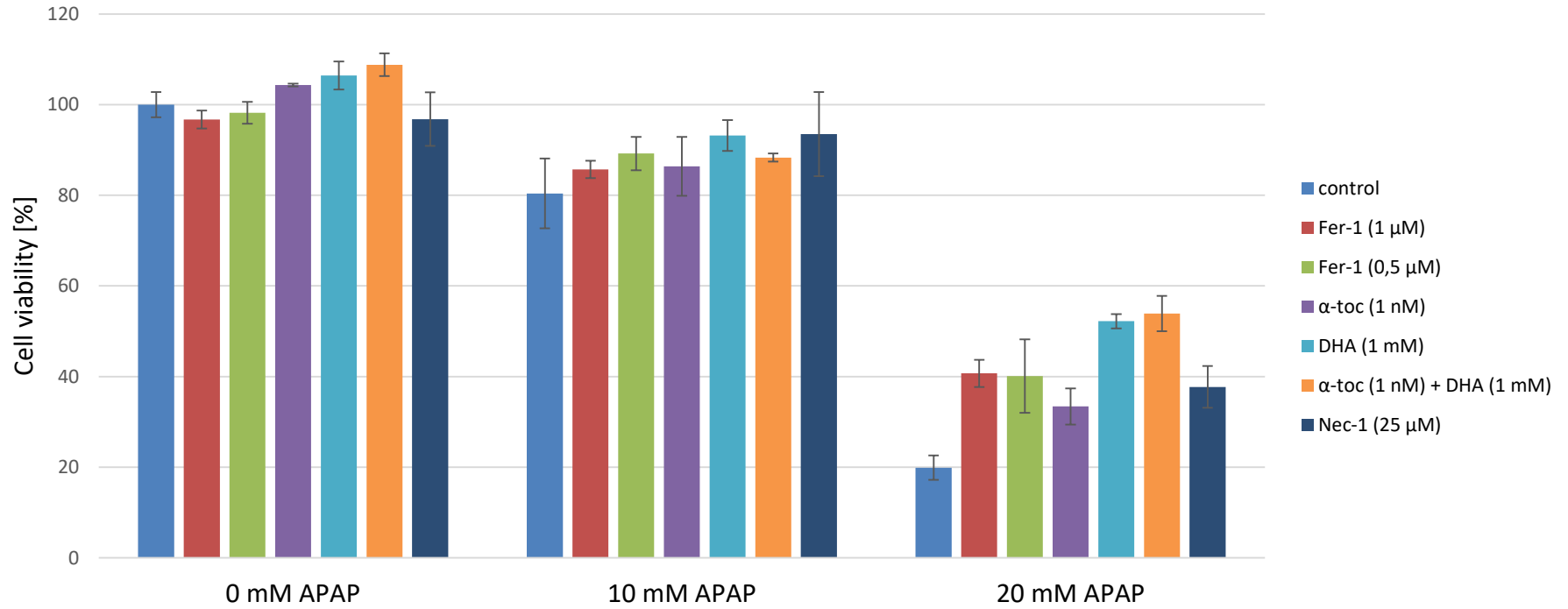
Acetaminofen toxicitás



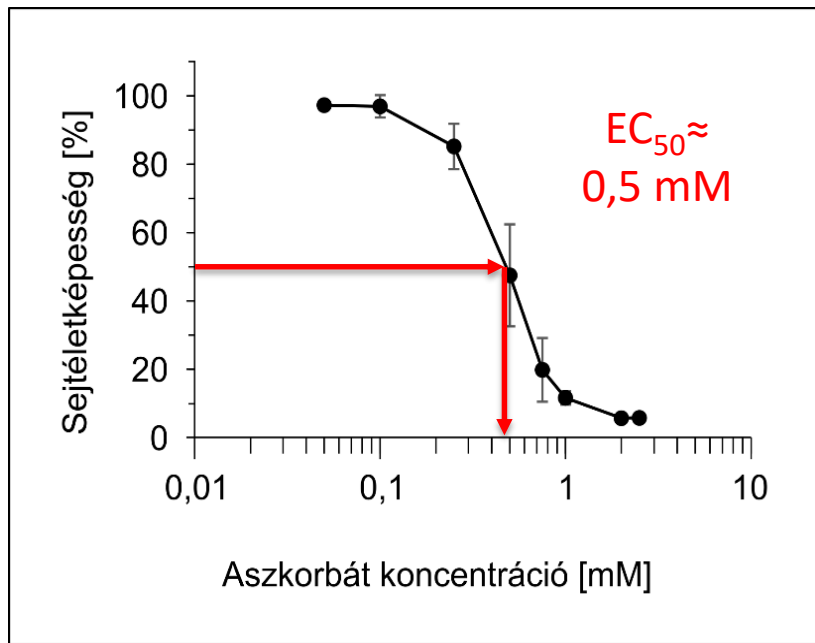
Aszkorbát toxicitás



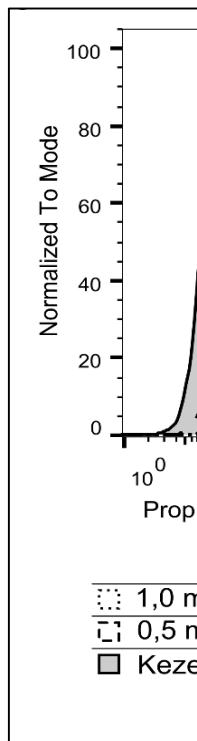
A ferroptózis szerepet játszik az acetaminofen túladagolás kiváltotta sejthalálban



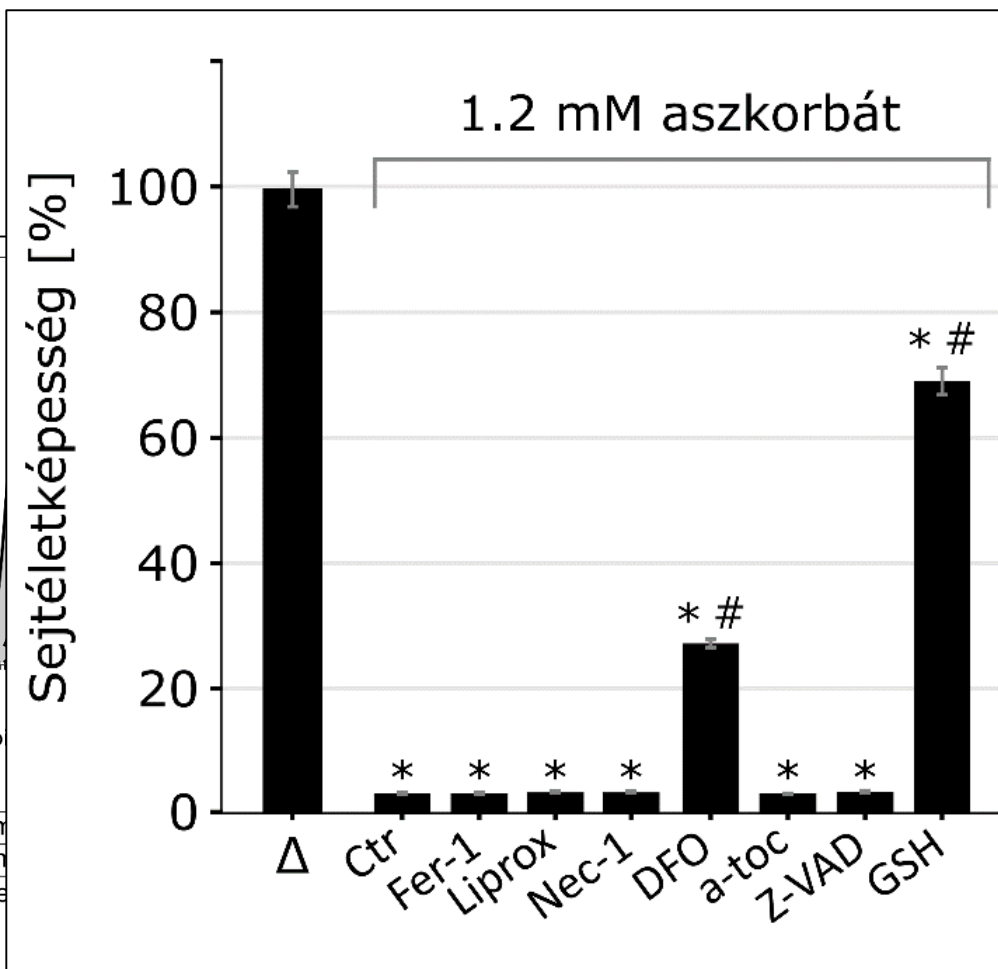
Az aszkorbát citotoxicitása



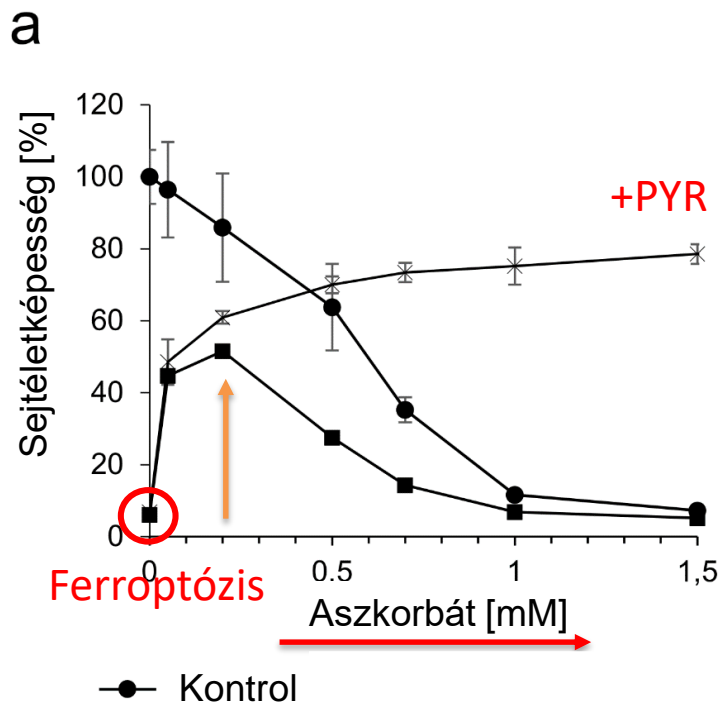
MTT, 24h



HT-1080 fibrosarkóma
(N-RAS+)



Az aszkorbát és a ferroptózis induktorok együttes hatása

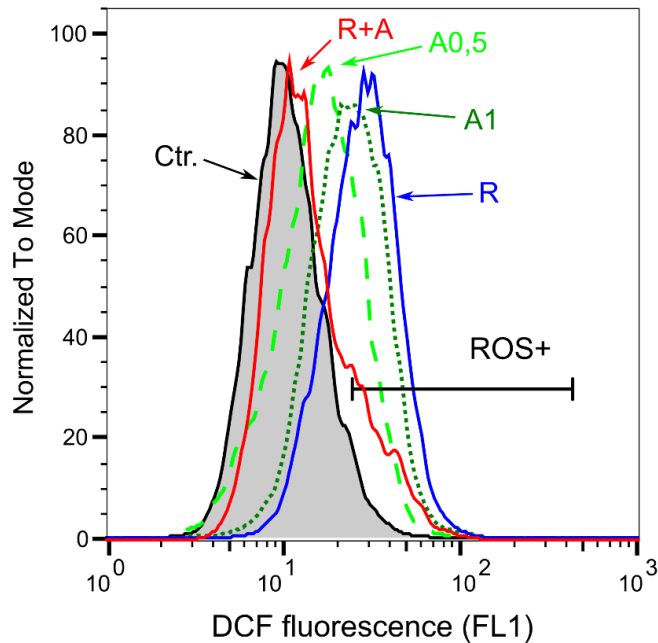


HT-1080 fibr.
(N-RAS+)

MTT, 24h

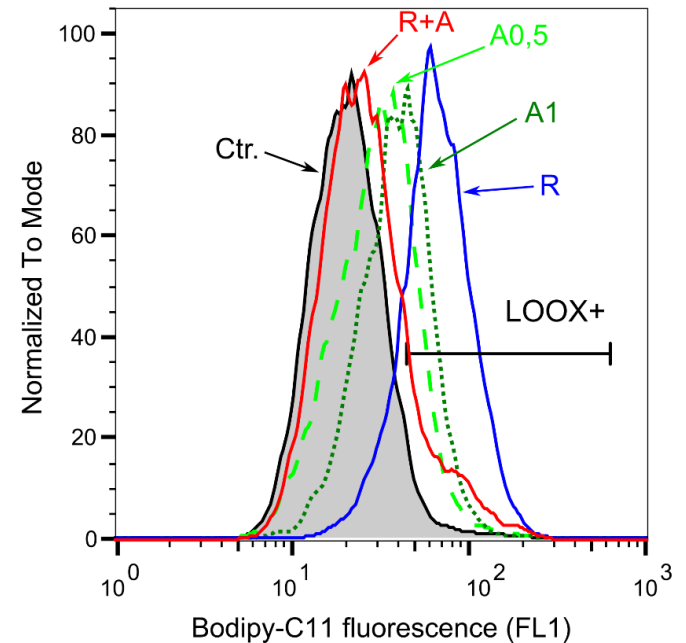
Farmakológiai aszkorbát és RSL kezelés hatása a reaktív oxigénszarmazékok képződésére

ROS-képződés



% of total in ROS+	
□ 0,5 μg/ml RSL3 +0,1 mM Asc.	18,7
□ 0,5 μg/ml RSL3	63,8
⋯ 1,0 mM Asc.	48,7
⋯ 0,5 mM Asc.	23,5
■ Control	5,10

Lipid-peroxidáció



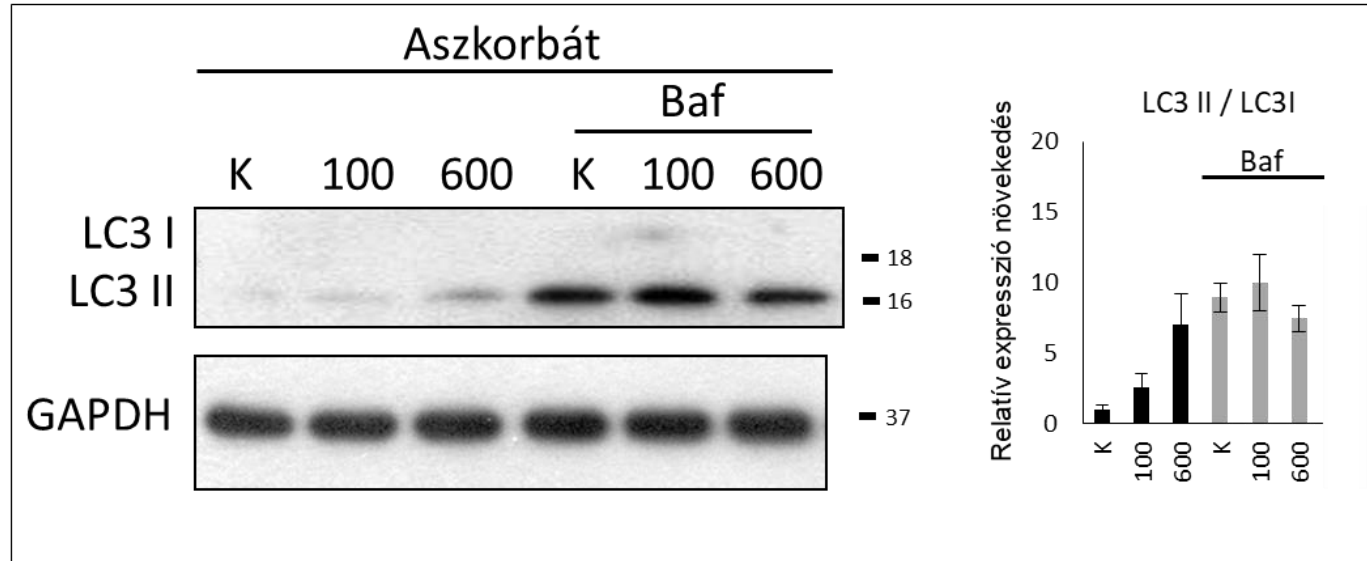
% of total in LOOX+	
□ 0,5 μg/ml RSL3 +0,1 mM Asc.	16,8
□ 0,5 μg/ml RSL3	82,4
⋯ 1,0 mM Asc.	40,5
⋯ 0,5 mM Asc.	22,8
■ Control	5,25

HT-1080 fibr.
(N-RAS+)

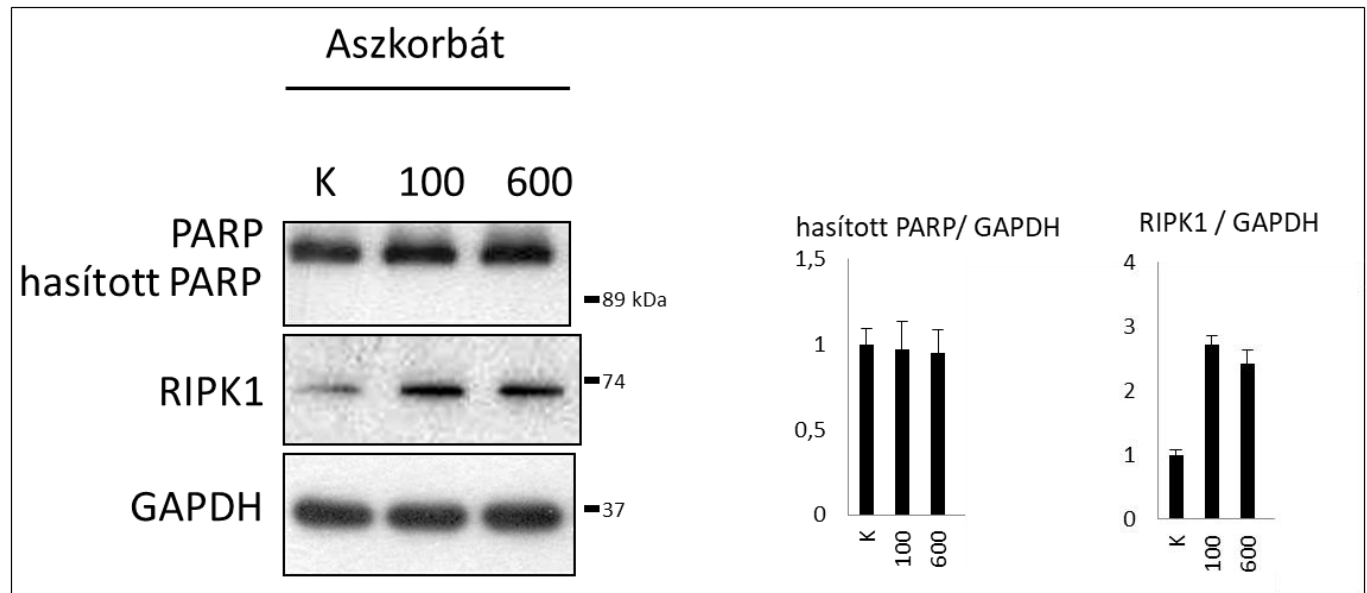
Az aszkorbát hatása az autofágia, apoptózis, nekroptózis kulcsfehérjéire

HT-1080 fibr.
(N-RAS+)

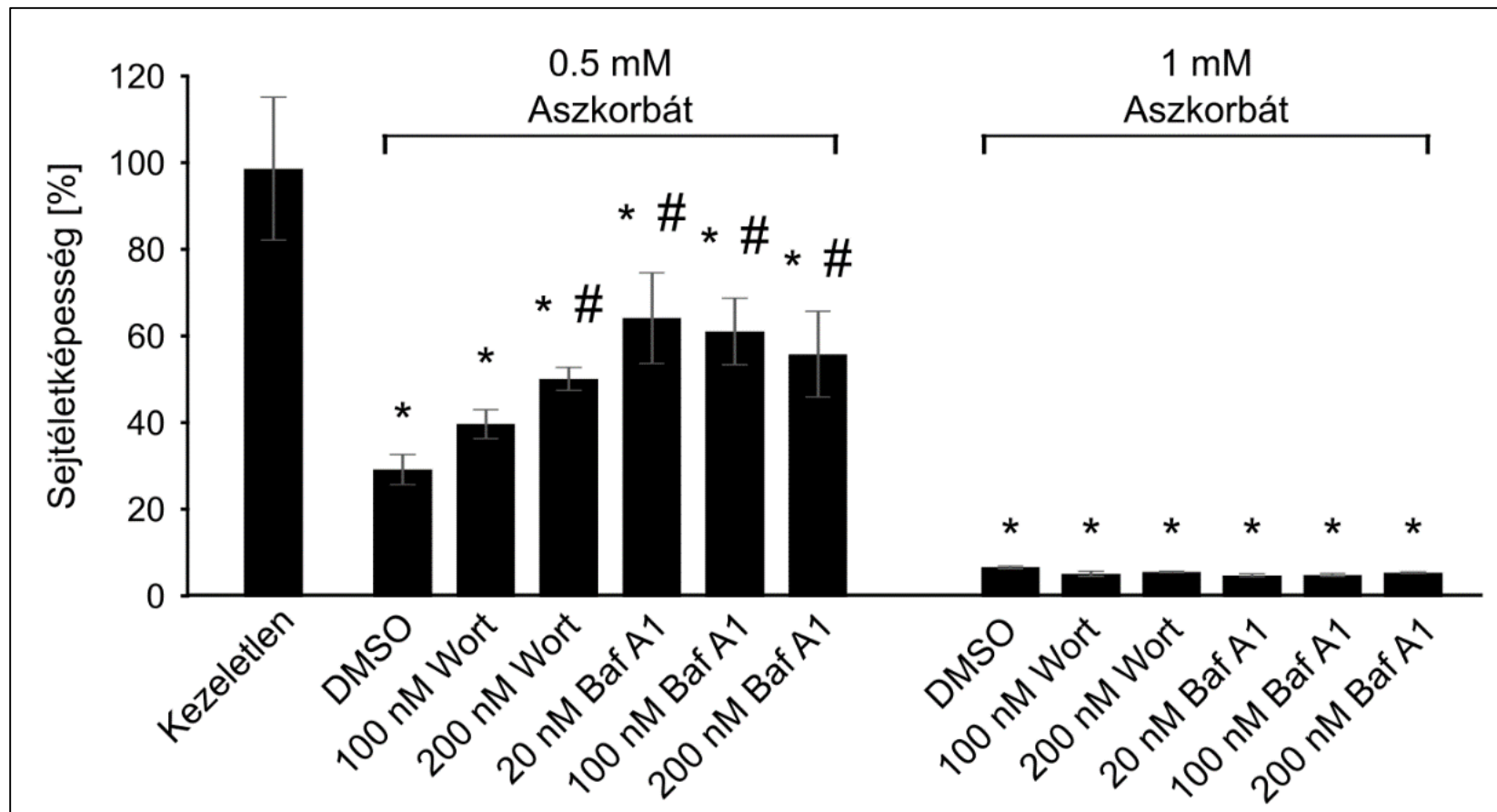
WB, 2h



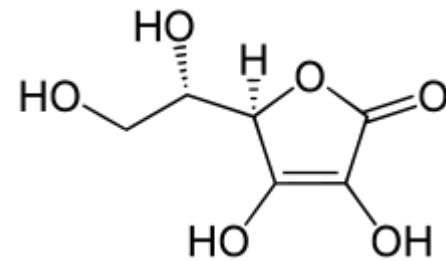
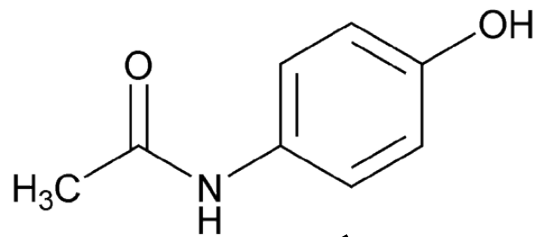
WB, 2h



HT-1080 fibroszarkóma
(N-RAS+)



MTT, 24h



**Nekroptózis,
Apoptózis,
Autofágia
Ferroptózis**

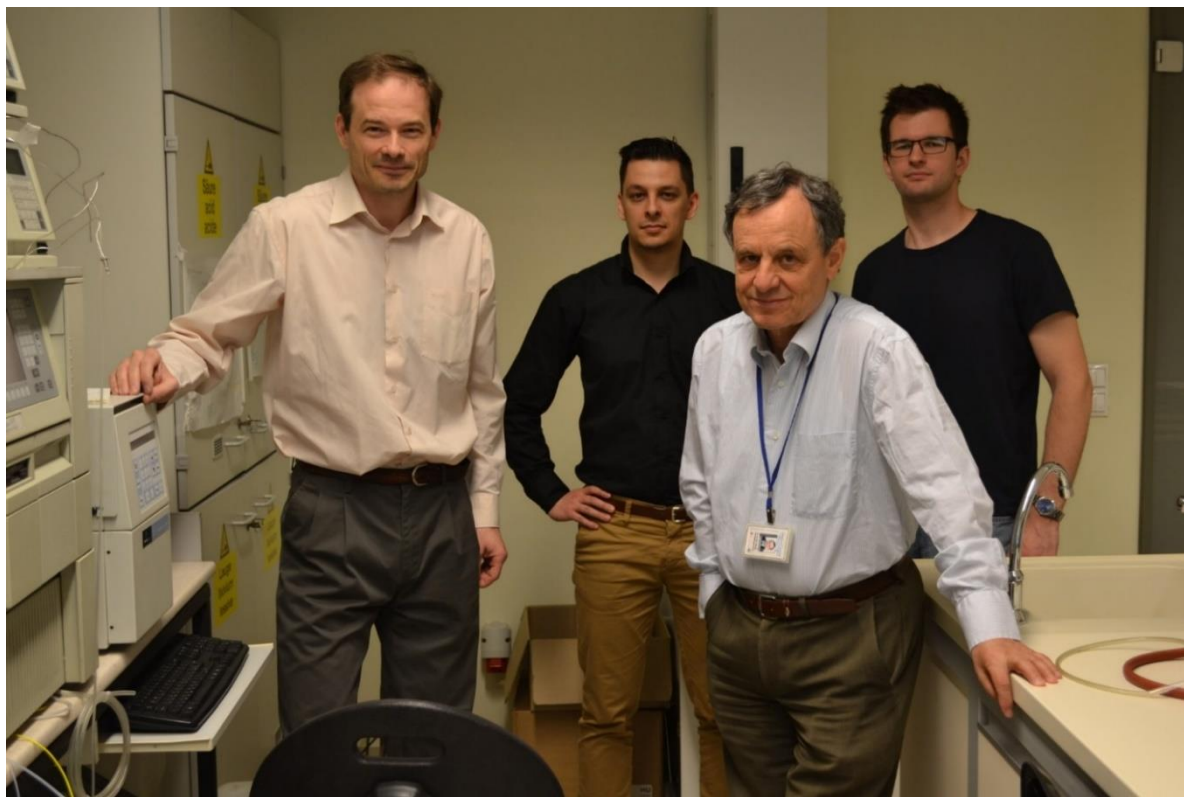
~~Apoptózis,
Autofágia~~
Nekroptózis

~~Ferroptózis~~

Sejthalál



Köszönjük szépen a Támogatást és a Figyelmet!



Szarka András, Lőrincz Tamás, Mandl József, Balogh Tibor



**Jemnitz Katalin
Veres Zsuzsanna**



**Kapuy Orsolya
Holczer Mariann**

