

Science Question 7: In vivo Mutagenicity

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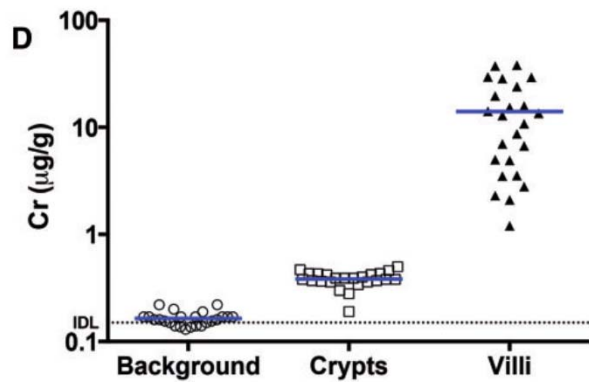
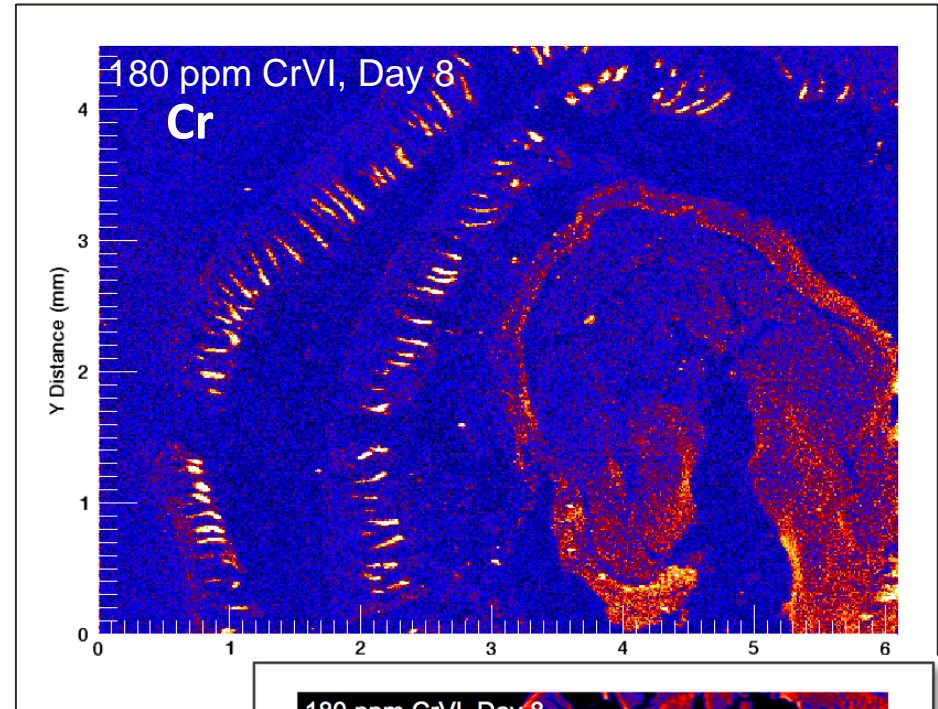
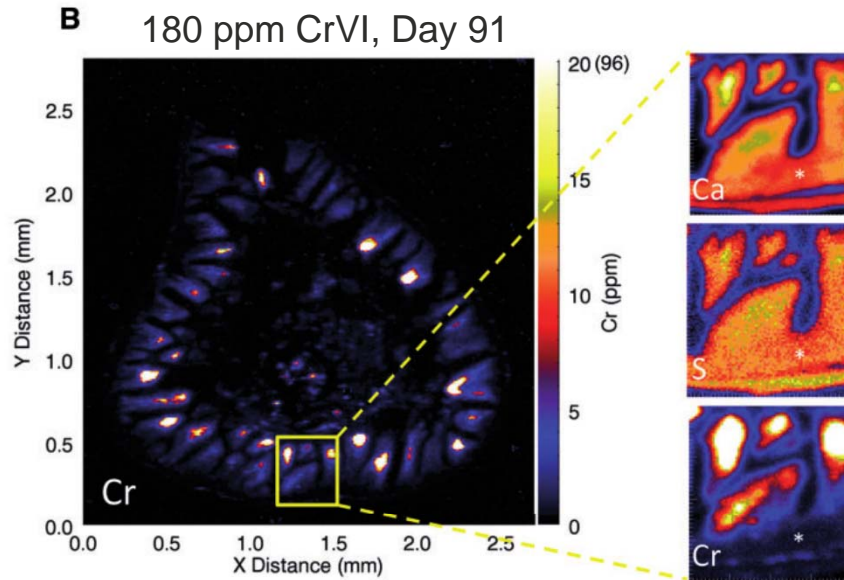
Supported by ACC

Oct 30, 2014

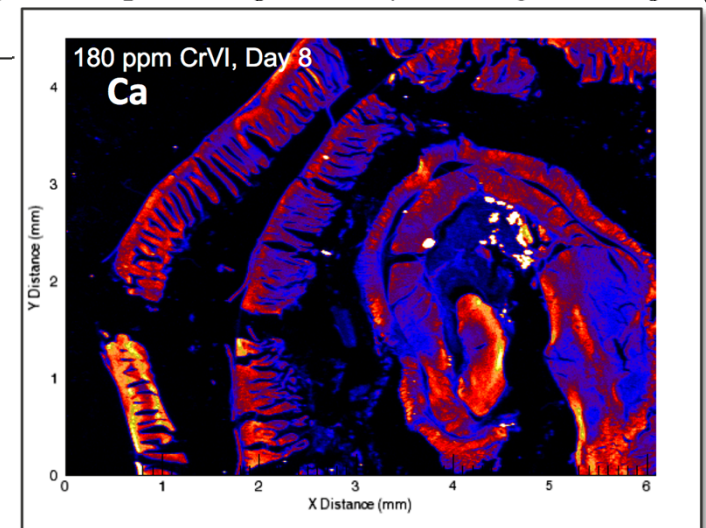
The logo for ToxStrategies, featuring the company name in a white serif font with a dot above the 'x' in 'Tox', set against a green curved background.

ToxStrategies

Cr Not Localized in Stem Cell Compartment



Unpublished Data



Thompson et al. (Tox Sci, in press)

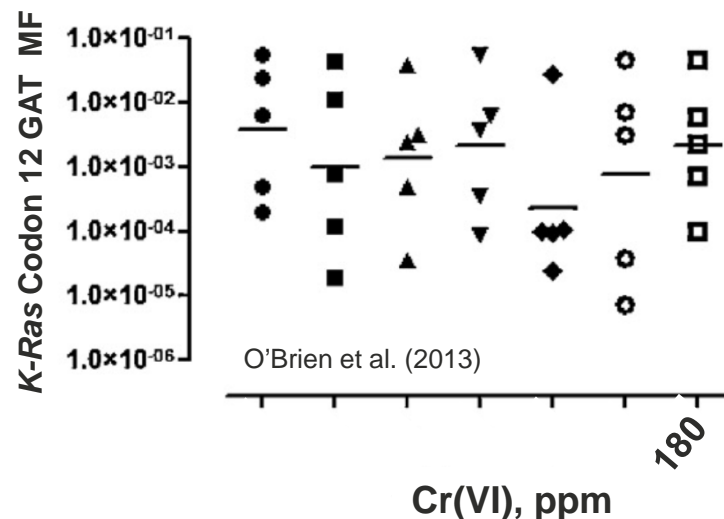
In vivo Genotoxicity & Mutagenicity Endpoints in Duodenum

γ-H2AX Immunostaining, Day 91 (Transverse):

Dose (ppm)	Animal	Crypt Epithel.	Villus Epithel.	Lamina propria, villus tip
0	6	2	0	0
0	7	2	0	0
0	8	2	0	0
0	9	2	0	0
0	10	2	0	0
180	482	2	1	2
180	483	2	0	2
180	484	2	1	2
180	485	2	1	2
180	486	2	2	2

Thompson et al. (Tox Sci, in press)

Kras Codon 12 Mutant Frequency After 90 Days of Exposure:



Micronuclei, Day 91 (Transverse):

Dose (ppm)	Enterocytes	Micronuclei
0	1921	0
0.1	1707	0
1.4	1825	0
5	1420	0
20	2386	0
60	2746	0
180	3194	0

O'Brien et al. (2013)

Micronuclei, Day 8 (Swiss Roll):

Treatment	Enterocytes	Micronuclei
0	3210	4
0	3484	0
1.4 ppm Cr6	3159	1
20 ppm Cr6	3876	1
180 ppm Cr6	5103	0
CP _{po} (50 mg/kg)	3400	30

Unpublished prelim. data