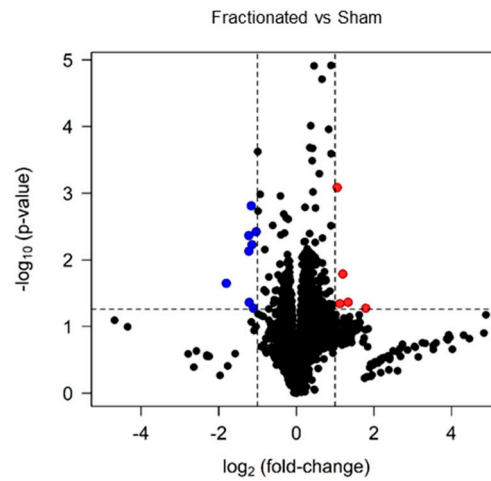


Supplementary Figure S1. Exposure to 0.5 Gy TBI does not alter bone mass in young adult male mice. Quantification of spinal bone mass from 4-month-old male C57BL/6 sham- or IR-exposed mice 4 weeks after irradiation (n=7-8 animals/group). (A) Bone volume over tissue volume (BV/TV), (B) bone mineral density (BMD), (C) trabecular number, (D) spacing, and (E) thickness of trabecular bone measured in the spine of irradiated mice and sham controls by μ CT. Data are presented as \pm SD. P values were determined using Student's *t* test.

A**B**

Proteins	Fold	Proteins	Fold
Pex6	-1.80644	Arhgef7	1.33236
S100a8	-1.22432	M6	1.196276
S100a9	-1.22186	Nubp2	1.122101
Gm4951	-1.21828	Banf1	1.053063
Ctsg	-1.16361	Cln6	0.934011

Supplementary Figure S2. Pex6 might be a regulator of TBI exposure in osteoclasts. **(A-B)** BMMs were isolated from fractionated TBI mice and sham controls described in Figure 1 and cultured with M-CSF (30 ng/mL) and RANKL (30 ng/mL) for 3 days to make pre-osteoclasts. **(A)** Quantitative analysis of global proteome was performed by label-free tandem mass spectrometry. **(B)** The fold change in total proteins is presented in the Volcano plots for the effects of IR.