

**Figure 2.** Intracellular composition. (A) Localization of various elements in a mammalian PC12 cell (exposed to  $MnCl_2$ ). Reprinted with permission from ref 44. Copyright 2009 Royal Society Publishing. (B) Average pH values of organelles and compartments in mammalian cells. Adapted with permission from ref 92. Copyright 2010 Nature Publishing Group.