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Dopamine promotes cellular iron accumulation and oxidative stress responses in macrophages

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Abbreviations:

transferrin receptor 1 (TfR1); divalent metal transporter 1 (Dmt1); hypoxia-inducible factor (HIF-1 α); iron regulatory protein (IRP); labile iron pool (LIP); ferritin heavy chain (FTH); ferritin light chain (FTL); ferroportin-1 (Fpn1); lipocalin-2 (Lcn2); 2,5-dihydroxy benzoic acid (2,5-DHBA); Parkinson's disease (PD); L-dihydroxyphenylalanine (DOPA); dopamine (DA); norepinephrine (NE); monoamine oxidase (MAO); reactive oxygen species (ROS); monoamine oxidaseinhibitor (MAO-I); catechol-O-methyl-transferase (COMT); dopamine receptor (DRD); solute carrier (SLC); nuclear factor erythroid 2-related factor (Nrf2); heme oxygenase-1 (HO-1); bone-marrow-derived macrophages (BMDMs); wild-type (Wt); peritoneal macrophages (PMs); deferoxamine (DFO); quantitative real-time PCR (qRT-PCR); hypoxanthine phosphoribosyltransferase (HPRT); non-transferrin bound iron (NTBI); transferrin bound iron (TBI); antioxidative responsive element (ARE); mitochondrial superoxide dismutase (mnSOD); tyrosine-hydroxylase inhibitor (Tyr-Hyd. Inh.); N-acetylcysteine (NAC);

Keywords:

Dopamine, iron, macrophage, catecholamine, oxidative stress;

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