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6卷23期 2012年12月 [最新]

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核转录因子红细胞系-2p45相关因子-2调控抗氧化酶表达与帕金森病

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摘要: 帕金森病是最常见的神经元退行性疾病之一, 尽管其发病机制仍不十分清楚。但是, 在过去的研究基础上, 可以肯定的应激损伤在黑质部多巴胺能神经元退行性变中起着重要作用。

关键词: 红细胞; 帕金森病

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文献标引:徐先结, 叶钦勇.核转录因子红细胞系-2p45相关因子-2调控抗氧化酶表达与帕金森病[J/CD].中华临床医师杂志: 电子版, 2011, 5(8):2330-2334.

参考文献:

- [1] Cuadrado A, Rojo AI. Heme oxygenase-1 as a therapeutic target in neurodegenerative diseases and brain infections. *Curr Pharm Des*, 2008, 14: 429-442. [\[PubMed\]](#)
- [2] Haas RH, Nasirian F, Nakano K, et al. Low platelet mitochondrial complex I and complex II/III activity in early untreated Parkinson' s disease. *Ann Neurol*, 1995, 37: 714-722. [\[PubMed\]](#)
- [3] Betarbet R, Greenamyre JT. Parkinson' s disease: animal models. *Handb Clin Neurol*, 2007, 83: 265-285. [\[PubMed\]](#)
- [4] Rojo AI, Montero C, Salazar M, et al. Persistent penetration of MPTP through the nasal route in Parkinson' s disease in mice. *Eur J Neurosci*, 2006, 24: 1874-1884. [\[PubMed\]](#)
- [5] Kushnareva Y, Murphy AN, Andreyev A. Complex I-mediated reactive oxygen species generation: modulation by cytochrome c and NAD(P) + oxidation-reduction state. *Biochem J*, 2002, 368: 545-553. [\[PubMed\]](#)
- [6] Fasano M, Bergamasco B, Lopiano L. Modifications of the iron-neuromelanin system in Parkinson disease. *J Neurochem*, 2006, 96: 909-916. [\[PubMed\]](#)
- [7] Kuhn DM, Arthur RE Jr, Thomas DM, et al. Tyrosine hydroxylase is inactivated by catechol-quinone and converted to a redox-cycling quinoprotein: possible relevance to Parkinson' s disease. *J Neurochem*, 1999, 73: 1309-1317. [\[PubMed\]](#)
- [8] Tessari I, Bisaglia M, Valle F, et al. The reaction of alpha-synuclein with tyrosinase: possible implications for Parkinson disease. *J Biol Chem*, 2008, 283: 16808-16817. [\[PubMed\]](#)
- [9] LaVoie MJ, Ostaszewski BL, Weihofen A, et al. Dopamine covalently modifies and functionally inactivates parkin. *Nat Med*, 2005, 11: 1214-1221. [\[PubMed\]](#)
- [10] Smith PF. Inflammation in Parkinson' s disease: an update. *Curr Opin Investig Drugs*, 2008, 9: 47-53. [\[PubMed\]](#)
- [11] Gerhard A, Pavese N, Hotton G, et al. In vivo imaging of microglial activation with [11C](R)-PK11195 PET in idiopathic Parkinson' s disease. *Neurobiol Dis*, 2006, 21: 404-412. [\[PubMed\]](#)
- [12] Chen H, Jacobs E, Schwarzschild MA, et al. Nonsteroidal anti-inflammatory drug use and the risk for Parkinson' s disease. *Ann Neurol*, 2005, 58: 963-967. [\[PubMed\]](#)
- [13] Furukawa M, Xiong Y. BTB protein Keap1 targets antioxidant transcription factor Nrf2 for ubiquitination by the Cullin 3-Roc1 ligase. *Mol Cell Biol*, 2005, 25: 162-171. [\[PubMed\]](#)
- [14] Tong KI, Padmanabhan B, Kobayashi A, et al. Different electrostatic potentials define ETGE motifs as hinge and latch in oxidative stress response. *Mol Cell Biol*, 2007, 27: 7511-7521. [\[PubMed\]](#)
- [15] Padmanabhan B, Tong KI, Ohta T, et al. Structural basis for defects of Keap1 activity provoked by point mutations in lung cancer. *Mol Cell*, 2006, 21: 689-700. [\[PubMed\]](#)

- [16] Ikeyama S, Kokkonen G, Shack S, et al. Loss in oxidative stress tolerance with aging linked to reduced extracellular signal-regulated kinase and Akt kinase activities. *Faseb J*, 2002, 16: 114–116. [PubMed]
- [17] Kwok JB, Hallupp M, Loy CT, et al. GSK3B polymorphisms alter transcription and splicing in Parkinson's disease. *Ann Neurol*, 2005, 58: 829–839. [PubMed]
- [18] Salazar M, Rojo AI, Velasco D, et al. Glycogen synthase kinase-3beta inhibits the xenobiotic antioxidant cell response by direct phosphorylation and nuclear exclusion of the transcription factor Nrf2. *J Biol Chem*, 2006, 281: 14841–14851. [PubMed]
- [19] Jain AK, Jaiswal AK. GSK-3beta acts upstream of Fyn kinase in regulation of nuclear export and degradation of NF-E2 related factor 2. *J Biol Chem*, 2007, 282: 16502–16510. [PubMed]
- [20] Wang W, Yang Y, Ying C, et al. Inhibition of glycogen synthase kinase-3beta protects dopaminergic neurons from MPTP toxicity. *Neuropharmacology*, 2007, 52: 1678–1684. [PubMed]
- [21] Sun J, Hoshino H, Takaku K, et al. Hemoprotein Bach1 regulates enhancer availability of heme oxygenase-1 gene. *EMBO J*, 2002, 21: 5216–5224. [PubMed]
- [22] MacLeod AK, McMahon M, Plummer SM, et al. Characterization of the cancer chemopreventive Nrf2-dependent gene battery in human keratinocytes: demonstration that the KEAP1-NRF2 pathway, and not the BACH1-NRF2 pathway, controls cytoprotection against electrophiles as well as redox-cycling compounds. *Carcinogenesis*, 2009, 30: 1571–1580. [PubMed]
- [23] Ishikawa M, Numazawa S, Yoshida T. Redox regulation of the transcriptional repressor Bach1. *Free Radic Biol Med*, 2005, 38: 1344–1352. [PubMed]
- [24] Dhakshinamoorthy S, Jain AK, Bloom DA, et al. Bach1 competes with Nrf2 leading to negative regulation of the antioxidant response element (ARE)-mediated NAD(P)H: quinone oxidoreductase 1 gene expression and induction in response to antioxidants. *J Biol Chem*, 2005, 280: 16891–16900. [PubMed]
- [25] Satoh T, Lipton SA. Redox regulation of neuronal survival mediated by electrophilic compounds. *Trends Neurosci*, 2007, 30: 37–45. [PubMed]
- [26] Dinkova-Kostova AT, Fahey JW, Talalay P. Chemical structures of inducers of nicotinamide quinone oxidoreductase 1 (NQO1). *Methods Enzymol*, 2004, 382: 423–448. [PubMed]
- [27] Jakel RJ, Townsend JA, Kraft AD, et al. Nrf2-mediated protection against 6-hydroxydopamine. *Biochem Res*, 2007, 1144: 192–201. [PubMed]
- [28] Trinh K, Moore K, Wes PD, et al. Induction of the phase II detoxification pathway suppresses neuron loss in Drosophila models of Parkinson's disease. *J Neurosci*, 2008, 28: 465–472. [PubMed]
- [29] Han JM, Lee YJ, Lee SY, et al. Protective effect of sulforaphane against dopaminergic cell death. *Pharmacol Exp Ther*, 2007, 321: 249–256. [PubMed]
- [30] Jin F, Wu Q, Lu YF, et al. Neuroprotective effect of resveratrol on 6-OHDA-induced Parkinson's disease in rats. *Eur J Pharmacol*, 2008, 600: 78–82. [PubMed]
- [31] Jagatha B, Mythri RB, Vali S, et al. Curcumin treatment alleviates the effects of glutathione depletion in vitro and in vivo: therapeutic implications for Parkinson's disease explained via in silico studies. *Free Radic Biol Med*, 2008, 44: 907–917. [PubMed]
- [32] Satoh T, Kosaka K, Itoh K, et al. Carnosic acid, a catechol-type electrophilic compound, protects neurons both in vitro and in vivo through activation of the Keap1/Nrf2 pathway via S-alkylation of targeted cysteines on Keap1. *J Neurochem*, 2008, 104: 1116–1131. [PubMed]
- [33] Kweon MH, Adhami VM, Lee JS, et al. Constitutive overexpression of Nrf2-dependent heme oxygenase-1 in A549 cells contributes to resistance to apoptosis induced by epigallocatechin 3-gallate. *J Biol Chem*, 2006, 281: 33761–33772. [PubMed]
- [34] Murakami A, Ashida H, Terao J. Multitargeted cancer prevention by quercetin. *Cancer Lett*, 2008, 315–325. [PubMed]
- [35] Guzman-Beltran S, Espada S, Orozco-Ibarra M, et al. Nordihydroguaiaretic acid activates the antioxidant pathway Nrf2/HO-1 and protects cerebellar granule neurons against oxidative stress. *Cancer Lett*, 2008, 477: 167–171. [PubMed]
- [36] Kim SJ, Kim JS, Cho HS, et al. Carnosol, a component of rosemary (*Rosmarinus officinalis* L.) protects nigral dopaminergic neuronal cells. *Neuroreport*, 2006, 17: 1729–1733. [PubMed]
- [37] Park JA, Kim S, Lee SY, et al. Beneficial effects of carnosic acid on dieldrin-induced dopaminergic neuronal cell death. *Neuroreport*, 2008, 19: 1301–1304. [PubMed]
- [38] Martin D, Rojo AI, Salinas M, et al. Regulation of heme oxygenase-1 expression through the phosphatidylinositol 3-kinase/Akt pathway and the Nrf2 transcription factor in response to the antioxidant phytochemical carnosol. *J Biol Chem*, 2004, 279: 8919–8929. [PubMed]

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2011;5(8):2328-2329.

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2011;5(8):2335-2338 .

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2011;5(8):2347-2349.

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2011;5(8):2353-2356.

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2011;5(8):2357-2359.

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贺孝文. . 中华临床医师杂志: 电子版
2011;5(8):2360-2363 .

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王兴, 吴绮思, 肖占琴, 陈阳美. . 中华临床医师杂志: 电子版
2011;5(8):2364-2367.

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