**Supplement 4. Effects of EMF on P-53, NFB, and MAPK**

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| --- | --- |
| **P53** |  |
| RFR | Jin et al. (2021); Kim et al. (2021); [Kucukbagriacik](https://pubmed.ncbi.nlm.nih.gov/?sort=date&term=Kucukbagriacik+Y&cauthor_id=36062506) et al. (2022) |
| Static/ELF EMF | [Akbarnejad](https://pubmed.ncbi.nlm.nih.gov/?sort=date&term=Akbarnejad+Z&cauthor_id=28551545) et al. (2017a,b) (decrease and increase depending on intensity and duration of exposure); [Dehghani-Soltani](https://pubmed.ncbi.nlm.nih.gov/?sort=date&term=Dehghani-Soltani+S&cauthor_id=32644826) et al. (2021); Jin et al. (2021); Martinez et al. (2022); Mohamed et al. (2022); Sharma et al. (2021); Tian et al. (2002) (decrease); Vincenzi et al. (2012) |
| **NFB** |  |
| RFR | Ergun et al. (2022); Novoselova et al. (2017) |
| Static/ELF EMF | Kim et al. (2017); Miller et al. (2016) (decrease); Mohamed et al. (2022); Patruno et al. (2020); [Sakurai](https://pubmed.ncbi.nlm.nih.gov/?sort=date&term=Sakurai+T&cauthor_id=18163441),  [Terashima](https://pubmed.ncbi.nlm.nih.gov/?sort=date&term=Terashima+S&cauthor_id=18163441), and [Miyakoshi](https://pubmed.ncbi.nlm.nih.gov/?sort=date&term=Miyakoshi+J&cauthor_id=18163441), (2008); Tang et al. (2019); [Vianale](https://pubmed.ncbi.nlm.nih.gov/?sort=date&term=Vianale+G&cauthor_id=18410412) et al. (2008) (decrease);Vincenzi et al. (2012) (decreased);Wang et al. (2019) (decrease); Zhang et al. (2019); Zuo et al. (2018) |
| **MAPK** |  |
| RFR | [Buttiglione](https://pubmed.ncbi.nlm.nih.gov/?sort=date&term=Buttiglione+M&cauthor_id=17559061) et al. (2007); Gökçek-Saraç et al. (2017); He et al. (2016); [Leszczynski](https://pubmed.ncbi.nlm.nih.gov/?sort=date&term=Leszczynski+D&cauthor_id=12076339) et al. (2002); Novoselova et al. (2017); Sharma et al. (2019) |
| Static/ELF EMF |  [Fathi](https://pubmed.ncbi.nlm.nih.gov/?sort=date&term=Fathi+E&cauthor_id=28339498) and [Farahzadi](https://pubmed.ncbi.nlm.nih.gov/?sort=date&term=Farahzadi+R&cauthor_id=28339498) (2017);Hong et al. (2014);Hou et al. (2006); Jin et al. (2000);[Kapri-Pardes](https://pubmed.ncbi.nlm.nih.gov/?sort=date&term=Kapri-Pardes+E&cauthor_id=29035881) et al. (2017); Li et al. (2013); Ma et al. (2013); Martini et al. (2020); Merighi et al. (2020); Nie and Henderson (2003); Poh et al. (2018); Soda et al. (2008); Tang et al. (2019); [Wang](https://pubmed.ncbi.nlm.nih.gov/?sort=date&term=Wang+J&cauthor_id=23592926), [Cui](https://pubmed.ncbi.nlm.nih.gov/?sort=date&term=Cui+J&cauthor_id=23592926), and [Zhu](https://pubmed.ncbi.nlm.nih.gov/?sort=date&term=Zhu+H&cauthor_id=23592926) (2013); Xu et al. (2016); Yang et al. (2016); Yong et al. (2016) |

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