

**Recombinant Human CDKN2D / p19ink4d Protein (GST tag)**

**Cat.NO.: TP05601**

3th Edition

**Synonyms:**INK4D;p19;p19-INK4D

**Description:**Cyclin-dependent kinase inhibitor 2D(also known as CDKN2D or p19ink4d), a member of the INK4 family of cyclin-dependent kinase (CDK) inhibitors, negatively regulates the cyclin D-CDK4/6 complexes, which promote G1/S transition by phosphorylating the retinoblastoma tumor-suppressor gene product. It is clearly shown that DNA repair is the main target of p19ink4d effect and that diminished apoptosis is a downstream event. Experiments has uncovered a role of p19INK4d as a regulator of DNA-damage-induced apoptosis and suggest that it protects cells from undergoing apoptosis by allowing a more efficient DNA repair. It has been demonstrated that p19INK4d expression enhances cell survival under genotoxic conditions. Previous work has shown that inactivation of the cyclin-dependent kinase inhibitor (CKI) p19(Ink4d) leads to progressive hearing loss attributable to inappropriate DNA replication and subsequent apoptosis of hair cells. It may also involved in male reproductive function including testicular atrophy, alteration in serum follicle stimulating hormone, qualitative increase in germ cell apoptosis, and delayed kinetics of meiotic prophase markers.

**Form:**PBS

**Molecular Weight:**44.9 kDa

**Sequences:**Met 10Leu 166

**Purity:**> 95% by HPLC

**Concentration:**

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.