

## **Product datasheet for TP506466**

## OriGene Technologies, Inc.

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## **Smarce1 (BC047141) Mouse Recombinant Protein**

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Purified recombinant protein of Mouse SWI/SNF related, matrix associated, actin dependent

regulator of chromatin, subfamily e, member 1 (cDNA clone, with C-terminal MYC/DDK tag,

expressed in HEK293T cells, 20ug

Species: Mouse Expression Host: HEK293T

**Expression cDNA Clone** >MR206466 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MSKRPSYAPPPTPAPATQMPSTPGFVGYNPYSHLAYNNYRLGGNPGTNSRVTASSGITIPKPPKPPDKPL MPYMRYSRKVWDQVKASNPDLKLWEIGKIIGGMWRDLTDEEKQEYLNEYEAEKIEYNESMKAYHNSPAYL AYINAKSRAEAALEEESRQRQSRMEKGEPYMSIQPAEDPDDYDDGFSMKHTATARFQRNHRLISEILSES VVPDVRSVVTTARMQVLKRQVQSLMVHQRKLEAELLQIEERHQEKKRKFLESTDSFNNELKRLCGLKVEV DMEKIAAEIAQAEEQARKRQEEREKEAAEQAERSQSSMAPEEEQVANKAEEKKDEESIPMETEETHLEDT

AESQQNGEEGTSTPEDKESGQEGVDSMEVEGTSDSNTGSESNSATVEEPPTDPVPEDEKKE

**TRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

Tag: C-MYC/DDK
Predicted MW: 46.6 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

**Storage:** Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

Locus ID: 57376 UniProt ID: <u>054941</u>





## Smarce1 (BC047141) Mouse Recombinant Protein - TP506466

RefSeq Size: 2355

Cytogenetics: 11 D RefSeq ORF: 1233

**Synonyms:** 2810417B20Rik; 5830412H02Rik; 9030408N19Rik; Baf27

Summary: Involved in transcriptional activation and repression of select genes by chromatin remodeling

(alteration of DNA-nucleosome topology). Component of SWI/SNF chromatin remodeling complexes that carry out key enzymatic activities, changing chromatin structure by altering DNA-histone contacts within a nucleosome in an ATP-dependent manner (PubMed:12110891). Belongs to the neural progenitors-specific chromatin remodeling complex (npBAF complex) and the neuron-specific chromatin remodeling complex (nBAF complex). During neural development a switch from a stem/progenitor to a postmitotic chromatin remodeling mechanism occurs as neurons exit the cell cycle and become committed to their adult state. The transition from proliferating neural stem/progenitor cells to postmitotic neurons requires a switch in subunit composition of the npBAF and nBAF complexes. As neural progenitors exit mitosis and differentiate into neurons, npBAF complexes which contain ACTL6A/BAF53A and PHF10/BAF45A, are exchanged for homologous alternative ACTL6B/BAF53B and DPF1/BAF45B or DPF3/BAF45C subunits in neuron-specific complexes (nBAF). The npBAF complex is essential for the self-renewal/proliferative capacity of the multipotent neural stem cells. The nBAF complex along with CREST plays a role regulating the activity of genes essential for dendrite growth (PubMed:17640523). Also specifically interacts with the CoREST corepressor resulting in repression of neuronal specific gene promoters in non-neuronal cells (By similarity). Required for the coactivation of estrogen responsive promoters by SWI/SNF complexes and the SRC/p160 family of histone acetyltransferases (HATs)(PubMed:12145209). [UniProtKB/Swiss-Prot Function]