

# TNF Receptor-Associated Protein 1 (TRAP1), Human Recombinant

**CATALOG NO:** P1584-10 10 µg  
P1584-50 50 µg

**ALTERNATE NAMES:** HSP75, Mitochondrial HSP90, MtHSP90

**MOL. WT.** ~72kDa (N terminus His-Tag)

**SOURCE:** *E. coli*

**PURITY:** >95% SDS - PAGE

**ENDOTOXIN:** <50 EU/mg purified protein (LAL test)

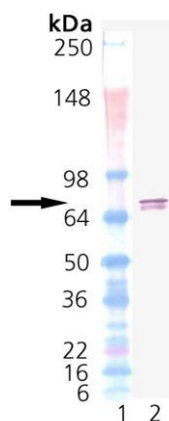
**FORM:** Liquid

**FORMULATION:** In 50 mM TRIS, pH 7.5, contains 150 mM sodium chloride, 1 mM DTT, and 1 mM EDTA.

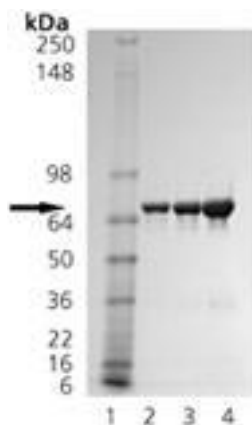
**STORAGE CONDITIONS:** For long term storage, aliquot and store at -80°C.

**DESCRIPTION:** The Hsp90 family of heat shock proteins represents one of the most abundantly expressed and highly conserved families of cellular chaperones whose expression can be upregulated under conditions of cellular stress. It includes cytoplasmic (Hsp90-alpha/beta), ER (Grp94) and mitochondrial (TRAP1) localized members. Hsp90 is structurally composed of an N-terminal ATP binding domain, a medial substrate-binding region, and a C-terminal dimerization motif. Hsp90 dimers function in cooperation with cochaperones to stabilize a multitude of client proteins substrates. TRAP1 (aka Hsp75) was originally identified as a chaperone binding partner for retinoblastoma protein. TRAP1 was later found by immunofluorescence to be localized to the mitochondria. TRAP1 is significantly more active as an ATPase due in part to the lack of regulatory elements in the C-terminus, but retains the ability to dimerize. However, it does not form stable complexes with typical cochaperones of Hsp90 like p23 and HOP4. TRAP1 has been identified as a protective element for cell survival, and has been suggested as a target for anti-cancer therapeutics.

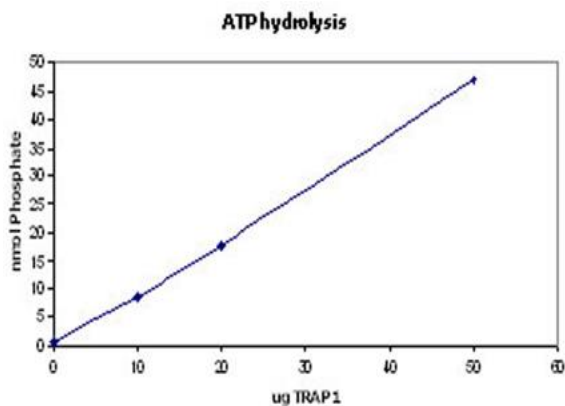
**AMINO ACID SEQUENCE:** aa 60-704



**Western Blot analysis:** Lane 1: MWM, Lane 2: TRAP1, probed with TRAP1 mAb.



**SDS-PAGE analysis:** Lane 1: MW marker, Lane 2: 1 µg, Lane 3: 2 µg, Lane 4: 5 µg TRAP1 protein



**ATPase Assay:** ATP hydrolysis after 1 hour at 37°C detected by malachite green. Quantities determined by comparison to potassium phosphate standard. Approximate activity is 1.2 nmol PO<sub>4</sub>/nmol TRAP1/min.

**RELATED PRODUCTS:**

- Heat Shock Protein 20, human recombinant (4847)
- Heat Shock Protein 65, mycobacterium recombinant (4856)
- Heat Shock Protein 90 (Hsp90), human recombinant (4858)
- Heat Shock Protein 70, human recombinant (4859)
- Heat Shock Protein 90 (Hsp90 beta) NT-His Tag, human recombinant (4858H)
- Heat Shock Protein 22, human recombinant (4850)
- HSBP1, human recombinant (4906)
- Heat Shock Protein 27, human recombinant (4853)

**FOR RESEARCH USE ONLY! Not to be used on humans.**