Biologicals Division **219 North Arkansas Street** **(479) 636-4361** **Fax 479-636-3562**
205 North Arkansas **(800) 643-3426**
Rogers, Arkansas 72756

Pel-Freez®
Product Specifications

Anti-Dopamine Transporter, C-Terminus

Size: 100 µl

Product Description: Affinity purified rabbit polyclonal antibody

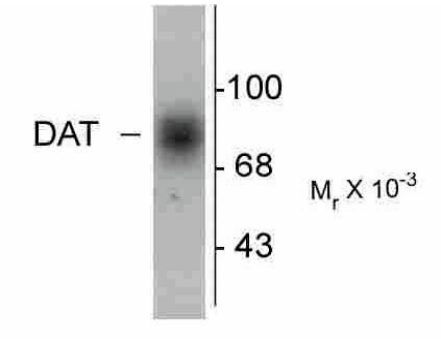
Applications: WB: 1:1000
IHC (frozen sections, formaldehyde fixed tissue; unpublished observations): 1:1000

Antigen: Peptide from the intracellular C-terminus region of human dopamine transporter (DAT), conjugated to keyhole limpet hemocyanin (KLH).

Species reactivity: The antibody has been tested in Western blots of SDS-solubilized human and mouse striatal samples and in IHC applications with monkey (Macaque) brain sections.

Biological Significance: The dopamine transporter (DAT) is responsible for the reaccumulation of dopamine after it has been released. DAT antibodies and antibodies for other markers of catecholamine biosynthesis are widely used as markers for dopaminergic and noradrenergic neurons in a variety of applications including depression, schizophrenia, Parkinson's disease and drug abuse (Kish et al., 2001; Zhu et al., 2000; Zhu et al., 1999). Levels of DAT protein expression are altered by chronic drug administration (Wilson et al., 1996).

Anti-Dopamine Transporter



Western blot of human caudate lysate showing specific immunolabeling of the ~88k DAT protein.

WB = Western Blot **IF** = Immunofluorescence **IHC** = Immunohistochemistry **IP** = Immunoprecipitation **Packaging:** 100 µl in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50% glycerol. Adequate amount of material to conduct 10-mini Western Blots. **Storage and Stability.** For long term storage – is recommended. Stable at – for at least 1 year. **Shipment:** Domestic - Blue Ice; International – Blue Ice or Dry Ice.

Purification Method: Prepared from rabbit serum by affinity purification using a SulfoLink® column matrix to which the peptide immunogen was coupled.

Antibody Specificity: Specific for the ~88k DAT protein in Western blots.

Quality Control Tests: Western blots performed on each lot.

References:

Kish SJ, Kalasinsky KS, Derkach P, Schmunk GA, Guttman M, Ang L, Adams V, Furukawa Y, Haycock JW (2001)Striatal dopaminergic and serotonergic markers in human heroin users. Neuropsychopharmacology 24:561-567.

Wilson JM, Kalasinsky KS, Levey AI, Bergeron C, Reiber G, Anthony RM, Schmunk GA, Shannak K, Haycock JW, Kish SJ (1996) Striatal dopamine nerve terminal markers in human, chronic methamphetamine users. NatMed 2:699-703.

Zhu MY, Klimek V, Haycock JW, Ordway GA (2000) Quantitation of tyrosine hydroxylase protein in the locus coeruleus from postmortem human brain. J Neurosci Meth 99:37-44.

Zhu MY, Klimek V, Dilley GE, Haycock JW, Stockmeier C, Overholser JC, Meltzer HY, Ordway GA (1999) Elevated levels of tyrosine hydroxylase in the locus coeruleus in major depression. Biol Psychiatry 46:12751286.

WB = Western Blot **IF** = Immunofluorescence **IHC** = Immunohistochemistry **IP** = Immunoprecipitation **Packaging:** 100 µl in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50% glycerol. Adequate amount of material to conduct 10-mini Western Blots. **Storage and Stability.** For long term storage – is recommended. Stable at – for at least 1 year. **Shipment:** Domestic - Blue Ice; International – Blue Ice or Dry Ice.