**BioVision** 03/15

PRODUCT: Sildenafil citrate

ALTERNATE NAME: 1-[[3-(4,7-Dihydro-1-methyl-7-oxo-3-propyl-1*H*-pyrazolo[4,3-

 ${\it d} ] pyrimidin-5-yl)-4-ethoxyphenyl] sulfonyl]-4-methylpiperazine$ 

citrate

**CATALOG #**: 2872-10, 50

**AMOUNT:** 10 mg, 50 mg

**MOLECULAR FORMULA:**  $C_{22}H_{30}N_6O_4S.C_6H_8O_7$ 

MOLECULAR WEIGHT: 666.71

STRUCTURE:

**CAS NUMBER:** 171599-83-0

APPEARANCE: White solid

**SOLUBILITY:** DMSO (~25 mg/ml)

**PURITY:** ≥98% by HPLC

**STORAGE:** Store at -20 °C. Protect from air and moisture

**DESCRIPTION:** Sildenafil citrate is a potent, orally active phosphodiesterase 5

(PDE5) inhibitor (IC $_{50}$  = 4 nM). Inhibition of PDE5 enhances the relaxation of smooth muscle in a range of vascular tissues by prolonging the nitric oxide/cGMP-mediated activation of cGMP-dependent protein kinase (PKG). Sildenafil also acts as a vasodilator and this property has been used to control vascular tone in pulmonary arterial hypertension and highaltitude pulmonary edema associated with altitude sickness.

REFERENCES: Terrett, N.K., et al. (1996). Bioorg. Med. Chem. Lett. 6, 1819-

1824.

**HANDLING:** Do not take internally. Wear gloves and mask when handling

the product! Avoid contact by all modes of exposure.

**RELATED PRODUCTS:** 

Apremilast (Cat. No. 2352-5, 25) Cilostamide (Cat. No. 2560-5, 25) Cilostazol (Cat. No. 2393-5, 25) IBMX (Cat. No. 1714-100)

Milrinone (Cat. No. 2163-5, 25)

PhosphoSeek™ PDE5 A Assay Kit (Cat. No. K705-400)

PDE3 Antibody (Cat. No. 3956-200) (R,S)-Rolipram (Cat. No. 2010-5) RO 20-1724 (Cat. No. 2042-50, 250) Roflumilast (Cat. No. 2675-10, 50) Zaprinast (Cat. No. 1715-25)

USAGE: FOR RESEARCH CH USE ONLY! Not to be used in humans