**BioVision** rev. 09/18

PRODUCT: GPNA (monohydrate)

ALTERNATE NAMES: (L-y-Glutamyl-p-nitroanilide, L-Glutamic acid 5-(4-nitroanilide)

**CATALOG NUMBER:** B2150-50, 250

**AMOUNT:** 50 mg, 250 mg

STRUCTURE:

$$H_2N$$
 $H_2N$ 
 $H_2N$ 
 $H_2N$ 
 $H_2N$ 
 $H_2N$ 
 $H_2N$ 
 $H_2N$ 

MOLECULAR FORMULA: C<sub>11</sub>H<sub>13</sub>N<sub>3</sub>O<sub>5</sub>.H<sub>2</sub>O

MOLECULAR WEIGHT: 285.25

**CAS NUMBER:** 7300-59-6

**APPEARANCE:** White to green yellow solid

SOLUBILITY: DMSO

PURITY: ≥98% by HPLC

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

**DESCRIPTION:** GPNA is a substrate for γ-glutamyl transpeptidase. GPNA has

also been shown to be an inhibitor of glutamine uptake - solute-linked carrier family A1 member 5 (SLC1A5). Cellular uptake of L-glutamine (regulated by SLC1A5) is a rate-limiting step that activates mTOR and is, thus, an interesting cancer

chemotherapy target.

**REFERENCE:** Marshall, A.D., et al. (2017). Oncogenesis **6**, page

e367 (2017)

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

the product! Avoid contact by all modes of exposure.

**RELATED PRODUCTS:** 

O-Benzyl-L-serine (B2152)

GPNA (B2150)

Glutamine Colorimetric Assay Kit (**K556**) Glutamate Colorimetric Assay Kit (**K627**)

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