



Amphetamine (6F2): sc-57618

BACKGROUND

Amphetamine is a stimulant used to diminish the appetite, control weight and treat some disorders. This drug acts by releasing stores of norepinephrine and dopamine from nerve endings by converting their respective molecular transporters into open channels. Amphetamine also prevents the monoamine transporters from recycling these neurotransmitters, which leads to increased amounts of them in synaptic clefts, thereby promoting nerve impulse transmission. Amphetamine releases stores of serotonin from synaptic vesicles, as well. Short-term psychological effects may include alertness, euphoria, increased concentration, rapid talking and increased confidence, while long term effects include insomnia, mental states resembling schizophrenia, aggressiveness, addiction or dependence accompanied by withdrawal symptoms, irritability, confusion and panic. Amphetamine is highly psychologically addictive and, with chronic use, tolerance develops rapidly.

REFERENCES

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4. Jain, R. et al. 2005. Caffeine induces differential cross tolerance to the Amphetamine-like discriminative stimulus effects of dopaminergic agonists. *Brain Res. Bull.* 65: 415-421.
5. Kondrad, R.L. et al. 2005. Transient disruption of attentional performance following escalating Amphetamine administration in rats. *Psychopharmacology* 175: 436-442.
6. Sulzer, D., et al. 2005. Mechanisms of neurotransmitter release by Amphetamines: a review. *Prog. Neurobiol.* 75: 406-433.
7. Narendran, R., et al. 2006. Amphetamine-induced dopamine release: Duration of action as assessed with the D(2/3) receptor agonist radiotracer -N-[(11)C]propyl-norapomorphine ([11C]NPA) in an anesthetized nonhuman primate. *Synapse* 61: 106-109.
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9. Sandor, V., et al. 2006. Protective effects of amphetamine on gastric ulcerations induced by indomethacin in rats. *World J. Gastroenterol.* 12: 7168-7171.

SOURCE

Amphetamine (6F2) is a mouse monoclonal antibody raised against Amphetamine conjugated to BSA.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Amphetamine (6F2) is recommended for detection of Amphetamine by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.