

Product Data Sheet

□ Cat # RP-402

Recombinant Human Cytochrome P450 2D6

Size: □ 5 ug

Cytochrome P450 2D6 is a member of a complex family of microsomal enzymes (mono-oxygenases) present in the endoplasmic reticulum membrane, which perform detoxification reaction on xenobiotic compounds. Cytochrome P450 2D6 is the molecular target of autoantibodies against the "liver kidney microsomal antigen 1" (LKM 1) which has been classically defined by immunofluorescence microscopy. The presence of these autoantibodies is considered indicative of Autoimmune Hepatitis Type 2; LKM 1 antibodies have also been detected in patients with hepatitis C viral infection. The International Autoimmune Hepatitis Group therefore has subdivided the AIH type 2 into two subgroups: 2a with HCV and 2b without HCV. AIH 2a patients are often over 40 and predominantly male. The use of a purified recombinant Cytochrome P450 2D6 antigen allows the differentiation of autoimmune hepatitis from drug-induced hepatitis where transient autoantibodies to other P450 family members occur which cannot be differentiated by immunofluorescence techniques.

Source: *Sf9 insect cells*. Cytochrome P450 2D6 Human Recombinant (also called liver/kidney microsomal antigen 1) produced in SF9, is a glycosylated, polypeptide chain having a molecular mass of 55,801 Dalton. The LKM1 is purified by proprietary chromatographic techniques. LKM-1 is supplied at a concentration of 1mg/ml in 16mM sodium phosphate buffer pH-7.6, 400mM sodium chloride, 0.08mM KI and 20% glycerol.

Immunological functions: 1. Binds IgG-type human auto-antibodies. 2. Standard ELISA test (checker-board analysis of positive/negative sera panels, including international reference serum NIBSC 66/387)

Applications and Suggested Dilutions: Western-Blot with monoclonal anti-LKM-1 antibody and autoimmune hepatitis patient sera. Coating concentration: 0.35-0.6 µg/ml (depending on the type of ELISA plate and coating buffer). Suitable for biotinylation and iodination. Greater than 40% as determined by SDS-PAGE. Users must optimize the appropriate concentration and conditions for each assay.

Storage and Stability: Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. Avoid multiple freeze-thaw cycles. If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage.

Usage: This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

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