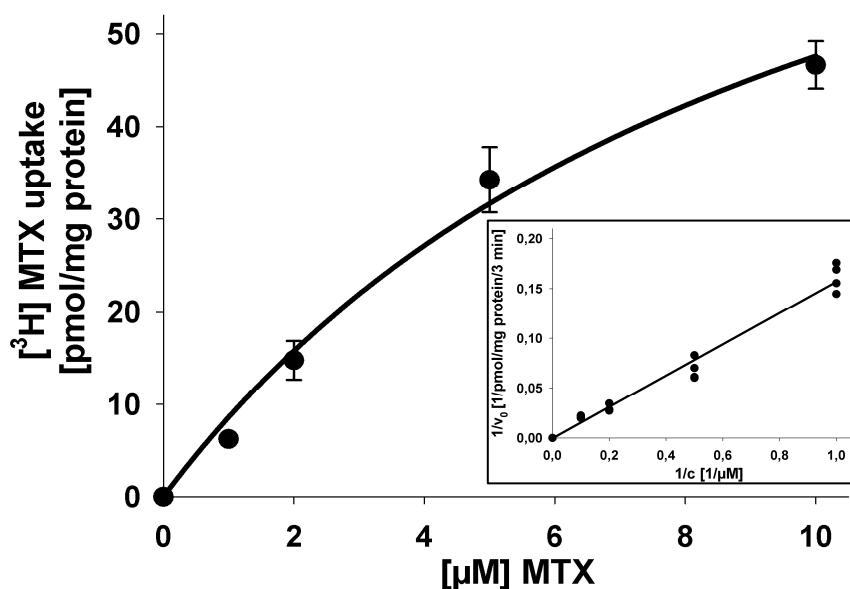


## MOLECULAR PHARMACOLOGY- SUPPLEMENTAL DATA

The antiepileptic drugs Phenobarbital and Carbamazepine reduce transport of methotrexate across the rat choroid plexus by downregulation of the Reduced folate carrier

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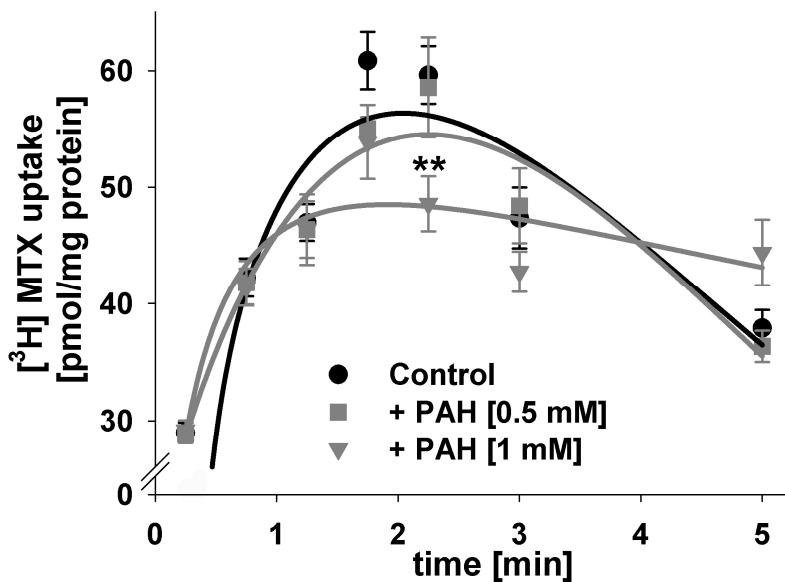
## SUPPLEMENTARY FIGURE 1



**Figure 2S.** Concentration-dependent uptake of MTX in Z310 cells. Uptake measurement was initiated by adding  $2 \times 10^5$  dpm [ $^3$ H] MTX and the indicated amounts of nonlabelled MTX to Z310 cells in aCSF. After 3 min, uptake was stopped by centrifugation of aliquots through a

silicon oil cushion and the incorporated radioactivity was measured by liquid scintillation counting. *Insert:* Corresponding Lineweaver-Burk plot. Values are mean  $\pm$  SEM ( $n = 4$ ).

## SUPPLEMENTARY FIGURE 2



**Figure 3S.** Effect of PAH on MTX influx in Z310 choroid plexus cells. Cells were harvested and the culture medium was replaced by aCSF. Then, cells were incubated with 5  $\mu\text{M}$  MTX containing  $2 \times 10^5$  dpm  $[^3\text{H}]$  MTX in the absence or presence of 0.5 mM or 1mM PAH. Uptake of MTX was stopped at the indicated time

points by centrifugation of aliquots through a silicon oil cushion and the incorporated radioactivity was measured by liquid scintillation counting. The data represent the mean  $\pm$  SEM of three different measurements in which quadruplicates were obtained. \*\*  $p < 0.01$ .

**SUPPLEMENTARY TABLE 1**

Primer pairs for RT-PCR analysis and size of the expected PCR products.

<b>Carrier</b>	<b>Primer pairs ( 5-3')</b>	<b>Size (bp)</b>	<b>T<sub>m</sub> (°C)</b>	<b>Reference</b>
rOat1	ACAAGCAAGGACAACCCGAA AGACATAGCCAATCAAGGTGCC	479	55	Kudo et al. (2002)
rOat2	GCAGCCTCCATCAAATCACATCA GCGCACAAAGGAAGTAGACCATA	626	58	Kudo et al. (2002)
rOat3	GGCCGGCGCATCACTCAGAGC CGGGATTATGGGATGCCTTTTC	411	55	
rOatp1a1	CATGAGTGTACTTCTCTCTTGG ATTCTGCTGGGTCTTGCCTTGG	531	58	Kudo et al. (2002)
rOatp1a4	GCCTAAGTATCTGGAACAGCAA CAGCGAGTATATGAAACAGCCA	540	58	Kudo et al. (2002)
rOatp1b2	GCCCACACCTTCACGATCAAA GCCAAGGATTGGTCCAATCAT	624	58	Halwachs et al. (2005)
rOapt1a3	TCGCATTCTGCCTATCCTTGT GCCTTTATTACACAGCCCCAGG	319	58	Kudo et al. (2002)
rOatp1a5	CTTTTGATCTGTGCGGGAGTGA CGCCATGTATGCAGCTTT	406	60	
rMrp1	CTGGCTCAGGGCTGTATTGTAAC CCTGTCCTGGGCTTGTCTGCT	512	64	
rMrp2	AAGCGCGAGGAGAGCATTAT ACGCACATTCCCAACACAAA	1226	56	Serrano et al. (2003)
rMrp3	CAGCGACAACGGGTGAGTT TCGGTGTCTGTCAAGTCTGTGT	404	58	Serrano et al. (2003)
rMrp4	GGACACTGAACTAGCAG GTCGCTGTCAATGATGG	229	50	Hirrlinger et al. (2002)
rMrp5	GGAACGGCAGTTGTTAT CTTGACAGCCACCTTG	310	50	Hirrlinger et al. (2002)
rMrp6	ACCAGTGATGACCTGGAGG CCACAATAGCCAGTGGTGTG	664	60	Hirrlinger et al. (2002)
rMdr1	TTGATATGCCCTGAGGAAACACG TGGATTGGCAAGGAGGCTGGAG	498	55	
rBcrp	ACCTGCAGACTTCTCCTGACG CCAGCTCTTTGCATTCCAGTG	434	64	
rRfc1	GGCAATGGGCACAAGGAAC GGAGCCTGCCCTGTGAG	476	55	Honscha et al. (2000)
rFOLR	GGCCAGGACCGAACCTCTCAA ATTATGCCCGAGGTCCAGTTC	418	58	Halwachs et al. (2005)
rPCFT	GCTTTCACGCTCCGCCATCACC CACCCCTGCTCCGACTCGCTCACTA	445	66	
GAPDH	ACCACAGTCCATGCCATCAC TCCACCACCCCTGTTGCTGTA	441	58	Halwachs et al. (2005)

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**REFERENCES FOR SUPPLEMENTARY TABLE 1**

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