Table 1 : CYP450 responsible to drug metabolism and their substrates, inhibitors, inducers, and reference compounds.

P450s	Substrates	Inhibitors (in vitro)	Inhibitors (in vivo)	Inducers	Marker drugs (in vivo)	Marker drugs (in vitro)
CYP1A2	Clopidogrel Flutamide Caffeine (Phenacetin) Theophylline	Furafylline alpha-Naphthoflavone Ellipticine Methoxsalen	Fluvoxamine Furafylline Ciprofloxacin Methoxsalen	Charcoal-grilled beef Cigarette smoke Cruciferous vegetables Omeprazole Griseofulvin	Caffeine	Phenacetin Ethoxyresorufin
CYP2A6	(Coumarin) Tegafur Nicotine SM-12502	R-(-)-Menthofuran Tranylcypromine Pilocarpine Ellipticine	Methoxsalen Ketoconazole		SM-12502 Nicotine	SM-12502 Coumarin
CYP2C8	Paclitaxel Diclofenac (5-OH) Rosiglitazone Fluvastatin	Paclitaxel Diclofenac Retinoic acid				Paclitaxel (6alpha-OH)
CYP2C9	NSAID drugs Phenytoin Tolbutamide S-Warfarin	Sulfaphenazole Dicoumarol	Sulfaphenazole Sulfinpyrazone	Rifampicin Barbiturates	S-Warfarin Tolbutamide	S-Warfarin Tolbutamide Indomethacin Diclofenac (4'-OH)
CYP2C19	(S-Mephenytoin) Diazepam Hexobarbital Imipramine Omeprazole Proguanil Propranolol	Omeprazole S-Mephenytoin Tranylcypromine Mephobarbital Papaverine	Omeprazole	Rifampicin Phenobarbital	(Mephenytoin) Omeprazole Proguanil Diazepam	Mephenytoin Omeprazole
CYP2D6	Antidepressants Neuroleptics beta-Blockers Antiarrhythmics Codeine Dextromethorphan Ethylmorphine Nicotine	Haloperidol Quinidine Ritonavir	Ajimaline Fluoxetine Paroxetine Quinidine Ritonavir		(Debrisoquine) Dextromethorphan Metoprolol	Debrisoquine Dextromethorphan Bufuralol
CYP2E1	(Chlorzoxazone) Alcohols Enflurane Dapsone	1,1,1-Trichloroethane	Diethyldithiocarbamate Dimethyl sulfoxide Disulfiram	Ethanol Isoniazid	(Chlorzoxazone)	p-Nitrophenol Chlorzoxazone
CYP3A4	Midazolam Erythromycin Cyclosporin Saquinavir Carbamazepine Felodipine Nifedipine Triazolam Simvastatin Terfenadine Dextromethorphan Verapamil Warfarin	Ketoconazole Metyrapone	Clotrimazole Ritonavir (Ketoconazole) Troleandomycin Clarithromycin Glibenclamide Itraconazole Grapefruit juice	Dexamethasone Phenytoin Rifampicin Troleandomycin Carbamazepine Phenobarbital	Felodipine Midazolam Simvastatin Dextromethorphan Triazolam [Cortisol-6OH excretion]	Felodipine Midazolam Simvastatin Dextromethorphan Testosterone Dapsone Diazepam Triazolam

Enzymes responsible to metabolism may change in vitro depending on the concentrations of substrates and inhibitors.

Enzymes are inhibited reversibly (ex. competitive inhibition) or irreversibly (ex. adduct formation). Influence to the drug metabolism are different between them.

There are cases where other enzymes or isoforms, which are not indicated in the table, are main metabolic enzymes.

SM-12502 : (+)-cis-3,5-dimethyl-2-(3-pyridyl) thiazolidin-4-one hydrochloride . Not approved for sale.

() : Therapeutic indications are different from abroad. For example, oral preparation of ketokonazole are not sold in Japan.

[] : Endogeneus substances that are often used as a index of metabolizing activity.