

**THIRD WORLD CENTER FOR CHEMICAL SCIENCES
INTERNATIONAL CENTER FOR CHEMICAL AND BIOLOGICAL SCIENCES
UNIVERSITY OF KARACHI
KARACHI-75270**

TENDER NOTICE NO. TWC-BIOASSAY-010414

Sealed tenders are invited from the sales tax registered firms with Sindh Board of Revenue and Income Tax Department for purchase/import of chemicals/enzymes on F.O.R. basis or import on item-wise C&F basis for the Center. The detail and specification of the items can be collected on any working day after notification of the NIT on the websites, from Purchase Office of the Center, between 9.00 a.m. to 12.30 p.m., on payment of Rs. 300/- (non-refundable), in shape of a pay order (Demand Draft by the out of Karachi suppliers), in favor of the Director, T.W.C., or downloaded from the websites www.iccs.edu and www.pprasindh.gov.pk. The last date of issuing of the bid documents is 31-03-2014. The tenders can be submitted in Purchase Office of the Center with 2% of the bid value as bid security, in shape of a pay order in favor of the Director, T.W.C., latest by 2.30 p.m. on 01-04-2014. The tenders will be opened in meeting room of the Center at 3.00 p.m. on the same day in presence of the bidders or their representatives. The Procuring Agency may reject all or any bid subject to the relevant provision of SPP rules.

For detail or any information:

Contact:

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DIRECTOR

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Dr. Atia-tul-Wahab

Dr. Panjwani Center for Molecular Medicine and Drug Research

University of Karachi

Karach-75270.

ENZYME INHIBITION CHEMICAL LIST

S. No.	Chemical Name	Company Name	Units/vial	Quantity	Estimated cost in Pak Rs.
1.	XANTHINE OXIDASE INHIBITION ASSAY				
a.	Enzyme : Xanthine Oxidase Bovine milk	Sigma Cat # X-4376 or equivalent	25 U	1 vial	52900
b.	Substrate: Xanthine	Sigma Cat # X-0626 or equivalent	-	10 g (1 vial)	19380
c.	Inhibitor: Allopurinol	Sigma Cat # A8003 or equivalent	-	5 g (1 vial)	13723
2.	IRON CHELATING ASSAY				
a.	Ferrous chloride (FeCl ₂ . 4H ₂ O)	Sigma Aldrich, USA Cat # 372870 or equivalent	-	25 g (1 vial)	12948
b.	Ferrozine	Serva Electrophoresi s GmbH ,Germany Cat # 21326 or equivalent	-	5 g (1 vial)	35889
c.	Disodium ethylenediamine tetraacetic acid (Na ₂ EDTA)	Sigma Aldrich, USA Cat # E5134	-	50 g (1 vial)	3115

		Or equivalent			
3.	NITRIC OXIDE RADICAL SCAVENGING ASSAY				
a.	Naphthylethylenediamine dihydrochloride	ICN Biomedicals, Germany Cat # 152549 or equivalent	-	25 g (1 vial)	16878
b.	Sulfanilic acid	ICN Biomedicals, Germany or equivalent Cat # 102990	-	100 g (1 vial)	5244
c.	Sodium nitroprusside	Merck, Germany Cat # 2549480 or equivalent	-	50 g (1 vial)	9187
4.	THYMIDINE PHOSPHORYLASE INHIBITION ASSAY				
a.	Enzyme: Thymidine phosphorylase (from <i>E. coli</i>)	Sigma Aldrich, USA Cat # T6632 or equivalent	900 U/5mL	(1 vial)	135804
b.	Substrate: thymidine	Sigma Aldrich, USA Cat # T-9250 or equivalent	-	10 g (1 vial)	44789
c.	Inhibitor: 7-Deazaxanthine	Santa Cruze Biotechnology Inc USA Sc-220800 or equivalent	-	500 mg (1vial)	29367
5.	UREASE INHIBITION ASSAY				
a.	Enzyme: Urease <i>Canavalia ensiformis</i> (Jack bean)	Sigma Aldrich, USA Cat # U1500 or equivalent	100 KU	(1 vial)	53402
b.	Substrate: Urea				
c.	Inhibitor: Thiourea				
d.	Sodium nitroprusside	Merck, Germany Cat # 2549480 or equivalent	-	50g (1 vial)	9187
e.	Phenol	TCI Cat# P1610 or equivalent	-	25g (1 vial)	2584
f.	Sodium hypochlorite	Scharlau Cat # SO04361000 or equivalent	-	1litre	24978
g.	Sodium hydroxide	Uni-chem Cat # S41298-4J or equivalent	-	1kg	13494
6.	β-GLUCURONIDASE INHIBITION ASSAY				
a.	Enzyme : β -Glucuronidase, from <i>Escherichia coli</i>	Sigma Cat # G7396 or equivalent	25 KU	1 vial	8010

b.	Substrate: 4-nitrophenyl- β -d-glucuronide	Sigma Cat # N1627 or equivalent	-	250 mg (1 vial)	14111
c.	Inhibitor: D-saccharic acid 1,4-lactone	Sigma Cat # S-0375 or equivalent	-	1 g (1 vial)	26988
7.	DPPH-RADICAL SCAVENGING ASSAY				
a.	Standard: Gallic acid	Sigma cat#G-8647 or equivalent	-	100 g (1 vial)	
b.	DPPH	Sigma Aldrich D9132-1G or equivalent	-	1 g (1 vial)	9991
8.	α-GLUCOSIDASE INHIBITION ASSAY				
a.	Enzyme : α -glucosidase (Sacchromyces cerevisiae)	Sigma Cat # G-0660 or equivalent	750 U	1 vial	33448
b.	Substrate: 4-NitroPhenyl α -D-glucopyranoside	Sigma Cat # N1377 or equivalent	-	1 g (1 vial)	8756
c.	Inhibitor: Acarbose	Sigma Cat # A8980 or equivalent	-	1 g (1 vial)	28854
9.	PEP INHIBITION ASSAY				
a.	Enzyme: Prolyl endopeptidase	Sigma Cat#E-1411, Flavobacterium SP. Or equivalent		1 vial	47517
b.	Substrate: N-benzyloxy carbonyl-gly-pro-pNa	Sigma, Cat#96286 or equivalent		500 mg (1 vials)	42205
c.	Inhibitor: Z-pro-prolinal	Sigma, Cat#SML0205 or equivalent		25 mg (1 vials)	42349
10.	PHOSPHODIESTERASE INHIBITION ASSAY				
a.	Enzyme: Phosphodiesterase1	Sigma , Cat# p-4631 Type-V, crude dried snake venom, broth atrox or equivalent		100 mg (1 vials)	38473
b.	Bis(p-nitrophenyl) Phosphate	Sigma, Cat#N-3002		1 g	24978

		or equivalent 4			
11.	CARBONIC ANHYDRASE INHIBITION ASSAY				
a.	Enzyme: Carbonic Anhydrase-II	Sigma , Cat# C-3934 Bovine erythrocyte or equivalent		100 mg (1 vials)	33448
b.	4-Nitrophenyl acetate	MP-Bio, cat#160888 or equivalent		25 g	19954
				TOTAL Rs.	861,951/-

SUMMARY SHEET

The tender will liable to be rejected if this form will not accompan^y the tender bid / quote

SERIAL No.	BID VALUE	FOREIGN CURRENCY	CONVERSION RATE

TOTAL BID VALUE IN PKR		
Earnest Money @ 2% in PKR		
Payorder / Bank Draft No:		Date: